United States Court of Appeals

for the

District of Columbia Circuit

TRANSCRIPT OF RECORD

BRIEF FOR APPELLANT AND JOINT APPENDIX

IN THE

United States Court of Appeals

DISTRICT OF COLUMBIA.

No. 9036

345

CROCKETT ENGINEERING COMPANY, a Maryland Corporation, *Appellant*,

v.

EHRET MAGNESIA MANUFACTURING COMPANY, a Pennsylvania Corporation, *Appellee*.

Appeal from the District Court of the United States for the District of Columbia.

United States Court of Appeals
for the District of Columbia
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EHRET MAGNESIA MANUFACTURING COMPANY, a Pennsylvania Corporation, *Appellee*.

Appeal from the District Court of the United States for the District of Columbia.

BRIEF FOR APPELLANT.

JURISDICTIONAL STATEMENT.

The complaint in the District Court sought to recover a money judgment in the amount of $19,915.06 (App. 5). The District Court had jurisdiction under Sections 11-301, 11-305 and 11-306, and this court has jurisdiction under Section 17-101 of the District of Columbia Code, 1940 Edition.

STATEMENT OF CASE.

On May 11, 1942, the appellant company, which is engaged in the business of a heating and plumbing contractor, entered into a written contract with the United States to furnish certain materials and to perform certain labor in the construction of a vacuum steam distribution system at the Army War College, Washington, D. C., in accordance with plans and specifications provided by the United States (Exs. 1-5).

On May 14, 1942, the appellee company entered into a subcontract with the appellant, evidenced by a series of letters, whereby the appellee company agreed to furnish certain materials and to perform certain labor in accordance with the plans and specifications provided by the United States (Exs. 6, 10-17). In substance, the appellee company contracted to furnish the underground piping, magnesia insulation thereon and the waterproofing over the insulation, and the installation of both the insulation and waterproofing.

The appellee company's system of insulating and waterproofing underground steam distribution systems was a so-called "pre-sealed" system; that is, instead of the more common practice of installing the insulation and waterproofing "in the field" after the piping has been placed in the trench, the insulation and waterproofing were installed on the piping at the appellee's factory. Because the piping had to be loaded and shipped and otherwise handled, the insulating and waterproofing done at the factory was limited to sections of pipe, each about 20 feet long. Several inches at either end of the sections of pipe were left uncovered so that workmen could weld the sections of pipe together after they had been placed in the trench. After the sections of pipe had been placed in the trench and welded together, the uncovered portions of the piping had to be insulated and waterproofed. Under the terms of the subcontract, the appellee was required to complete the installation of the insulation and waterproofing after the appellant had placed the sections of pipe in the trenches, had welded the sections together and had tested the welds to make sure that they were watertight. Until the appellee completed the installation of its insulation and waterproofing, the magnesia insulation applied at its factory remained uncovered and exposed to the weather at both ends of each section of pipe; that is to say, the insulation was not in fact "pre-sealed" as implied by the word used by appellee to describe its system (App. 147, 178; Exs. 6, 20-22, 28). This single fact more than any other gave rise to this litigation as will hereafter more fully appear.

The pipe was furnished and installed pursuant to the provisions of appellant's contract with the United States. Before final acceptance of the complete work under the contract, steam was seen coming out of the ground at various points along the line. The U. S. Engineers ordered the trenches opened again. The waterproofing and insulation were examined and found defective throughout the whole line (Exs. 31-42; App. 66, 70-74, 109, 128). The defects found were exclusively in the insulation and waterproofing; that is, exclusively in the work undertaken and guaranteed by the appellee. No leaks were found in the piping or in the welds made by the appellant (App. 70, 108). The water that had damaged the insulation and caused it to disintegrate had reached the insulation from outside the pipe. The U. S. Engineers condemned the insulation and waterproofing on about 2,100 feet of the line and ordered appellant to remove the insulation and waterproofing that had been installed and to reinstall new insulation and waterproofing. Appellant made the same demand on the appellee. Appellee refused the demand and appellant proceeded to do the work at a cost of $19,915.06 (App. 67-69). Appellant filed this action to recover that sum. Appellee's defense was that the condemnation by the United States Engineers' office was due solely and entirely to the appellant's own negligence. The case was tried to the Court and a jury. There was a verdict and judgment for the appellee.

Appellant filed a motion to set aside the verdict and to have judgment entered in accordance with its motion for a directed verdict and, in the alternative, for a new trial, which motion was overruled. This appeal followed.

STATEMENT OF POINTS.

1. The court erred in the admission of evidence and in not ruling promptly on the question of whose duty it was to protect the magnesia insulation from the weather, and as a result appellant did not have a fair trial.

2. The court erred in overruling appellant's motion for a directed verdict, and the result in the case is unjust, contrary to the evidence, the weight of the evidence and to the law.

3. The court erred in granting appellee's requests for instructions numbered 3 and 5.

4. The court erred in denying appellant's request for instruction numbered 7.

SUMMARY OF ARGUMENT.

1. It was the appellee's duty to protect its magnesia insulation from the weather. Therefore, evidence that appellant had not protected it was admitted erroneously.

It was error not to rule promptly on the question of whose duty it was to protect the insulation from the weather, so that the course of the evidence, instead of proceeding on the erroneous premise that it was the appellant's duty, as it did proceed for more than three trial days, could and would have proceeded in accordance with the correct premise; namely, that it was the duty of the appellee to protect the insulation from the weather.

Appellant did not have a fair trial because the jury was indoctrinated with the wrong theory of the case for more than three trial days. A brief instruction based on the correct theory of the case, granted after the close of all the evidence, came too late to undo the damage that had been done to appellant's case.

NOTE: After writing the argument and this summary thereof, counsel for appellant have discovered for the first time that the trial judge did not read the instruction to the jury (App. 236-241) although the appellant's prayer for the instruction was granted. (App. 243, 247.) Printing and filing time limitations do not permit consideration in this brief of the question presented by the discovery of this omission except to state (1) that the omission of the court to read the instruction to the jury was no doubt the result of excusable neglect on the part of the court and counsel for both sides, and (2) that the omission no doubt adversely affected the substantial rights of the appellant.

2. The decision in *Ehret Magnesia Manufacturing Company, Inc.* v. *Gothwaite,* U. S. App. D. C., Case No. 8868 (Decided May 21, 1945) is controlling.

There was no conflict in the evidence as to the nature and extent of the obligations assumed by the appellee. The appellee agreed to do certain work and to produce certain results and to guarantee certain results, in accordance with and as required by the terms of the contract, plans and specifications.

It was undisputed that the appellee did not produce the required results and that the work was not in accordance with the plans and specifications.

There was no conflict in the evidence that the work condemned by the U. S. Engineers was exclusively the work undertaken and guaranteed by the appellee, and that the work was defective and was removed and done over by the appellant at a cost of $19,915.06 after demand upon and refusal by the appellee.

The appellee's defense that the condemnation was due solely and entirely to the appellant's negligence was not established by the evidence. The theory of the defense was erroneous. It was based on the theory that damage to some material caused by negligence of the appellant made appellant responsible for the condemnation of all the insulation and waterproofing.

If it can be said that as to the insulation and waterproofing on certain portions of the line the evidence was in conflict and, therefore, appellant was not entitled to a directed verdict; nevertheless, the evidence relating to other portions of the line was undisputed and a result that denied the appellant any recovery at all is contrary to the evidence, the weight of the evidence and to the law.

3. The appellee's prayers numbered 3 and 5 were too broad. They disregarded two undisputed facts shown by the evidence; first, that the insulation and waterproofing broke contact at every manhole so that damage done between any two manholes would not cause damage between other manholes, and second, that from manhole "F" to the officers' mess building nothing occurred that the appellee could possibly have blamed on the appellant.

The insulation and waterproofing and the installation thereof were exclusively within the obligations assumed by the appellee. The appellee being the manufacturer of the underground equipment was itself required to make the installation in accordance with its own recommendations.

Failure of the appellant to follow some recommendation of the appellee did not require a verdict for the appellee unless the jury further found that it was as a result of such failure that all the insulation and waterproofing failed and was condemned. Instruction numbered 3 failed to so instruct the jury.

The contract established a progress schedule and fixed a time limit for completion of the job and provided for substantial liquidated damages for each day's delay. The appellee was bound thereby and it was error to instruct the jury that the appellee had a right to control the progress of its work and the appellant's work.

If the appellant laid the piping too rapidly and thereby damaged it, a verdict for the appellee was not required unless the jury further found that it was as a result of such damage to the piping that all the insulation and waterproofing failed and was condemned. Instruction numbered 5 failed to so instruct the jury.

4. The defense that the condemnation of the waterproofing and insulation was due solely and entirely to the appellant's own negligence was an affirmative defense and the court erred in denying the appellant's prayer to instruct the jury that the burden of proof thereof was on the appellee.

ARGUMENT.

Point 1.

The Court Erred in the Admission of Evidence and in Not Ruling Promptly on the Question of Whose Duty It was to Protect the Magnesia Insulation From the Weather, and as a Result Appellant Did Not Have a Fair Trial.

This case originated from the fact that until the appellee completed the installation of its insulation and waterproofing, the part of the insulation applied at its factory remained unsealed and exposed to the weather at both ends of each section of pipe. This fact gave rise to the question: Whose duty is it to protect this exposed magnesia from the weather? The appellee claimed it was the appellant's duty and the appellant contended it was the appellee's duty. That dispute continued to the very moment the case went to the jury. Until then the case had been tried and evidence admitted on the theory that it was the appellant's duty. The trial judge had not decided the question until then although it had been raised by counsel for appellant more than three trial days before.

During cross examination of appellant's first witness, who was its president, Mr. Crockett, the following occurred:

> "Q. Now, what was done by you, Mr. Crockett, to prevent water from getting into these various joints?
>
> Mr. Hilland: Just a minute. I object, if your Honor please, there was no duty on them. He wasn't doing the waterproofing. It was their job to do it.
>
> Now, he wants to know what he did to prevent the water from getting into something they were supposed to waterproof." (App. 83.)

Thereupon, considerable argument ensued and in the course of the argument of counsel for appellant, the court interposed and said:

> "The Court: I will let this stand for the present without ruling finally on the effect of it."

The question quoted above was then put to the witness again and substantial evidence was admitted that appellant had not protected the magnesia insulation from the weather (App. 85 et seq.).

Thus it appears that the trial judge did not rule on the question raised by appellant's objection to the evidence. Appellant raised the point again and again during the course of the evidence, but each time there was no ruling (App. 117, 168, 170, 184, 186, 187, 228, and 229).

During more than three trial days the jury was allowed to hear evidence that appellant had not protected the magnesia insulation from the weather. See particularly, but not exclusively, pages 85-91, 184-189, 191-194 of the joint appendix.

During the course of the evidence, the trial judge never made a ruling on the point raised by appellant's objections to the evidence. Appellant contends that it would have been error if the trial judge had merely done what he indicated he was going to do; namely, admit the evidence conditionally and rule on the point later. Actually, what the trial judge did amounted to an adverse ruling on appellant's objections to the evidence, and the court, throughout the trial, admitted evidence that appellant had not protected the magnesia insulation from the weather. After the close of all the evidence the trial judge allowed an instruction requested by the appellant that it was the appellee's duty to protect the magnesia insulation from the weather. (See note to summary of the argument of point 1) Undoubtedly, this instruction was a correct one and it necessarily follows that the jury ought not to have been permitted, during more than three trial days, to hear evidence that the appellant had not protected the magnesia insulation from the weather. Thus, the jury was led to believe throughout the trial that it was the duty of the appellant to protect the magnesia insulation from the weather. The jury undoubtedly concluded that the appellant had that duty. The jury, after hearing for so long so much testimony that the appellant had not protected the insulation from the weather, had become so thoroughly indoctrinated with that theory of the case that it could not be erased from their minds by a brief instruction, coming so late as it did, that it was the duty of the appellee to protect its magnesia insulation from the weather.

It was error not to rule promptly on the question of whose duty it was to protect the insulation from the weather, so that the course of the evidence, instead of proceeding on the erroneous premise that it was the appellant's duty, as it did proceed for more than three trial days, could and would have proceeded in accordance with the correct premise; namely, that it was the duty of the appellee to protect its insulation from the weather.

In effect what actually happened was this: Early in the trial the question of whose duty it was to protect the magnesia insulation from the weather was raised by the appellant. The trial judge did not rule promptly on the question and allowed the course of the evidence to proceed for more than three trial days on the erroneous premise that it was the appellant's duty. If the trial judge had ruled promptly on the question the course of the evidence could and presumably would have proceeded in accordance with the correct premise that it was the duty of the appellee to protect the insulation from the weather. The jury became thoroughly indoctrinated with the erroneous theory of the case, which a brief instruction, coming after the close of all the evidence and after the arguments of counsel, could not erase from the minds of the jurors. While the ultimate ruling on this vital and primary question in the case was favorable to the appellant, the fact remained that the appellant had not had a fair trial up to the moment that the favorable ruling was made. The ruling was too long in coming to straighten out the damage that had been done to the appellant's case. Jurors, presumably serving in strange surroundings and dealing with a subject matter unfamiliar to them, are, like children, highly impressionable and once they have been taught one thing for a long time they cannot by one brief instruction be taught the contrary. Even if it could be said that the trial judge did not err in the admission of evidence that the appellant had not protected the insulation from the weather and even though it could be said that the trial judge did not err in failing to rule promptly on the question of whose duty it was to protect the insulation, the fact remains that the appellant did not have a fair trial because the jury was indoctrinated with the wrong theory of the case and allowed to remain in that frame of mind for several days before it was instructed correctly.

Counsel for appellant concede the general rule is that where an error in the admission of evidence does not affect the substantial rights of an appellant or the evidence is withdrawn before the close of the trial or the jury is instructed to disregard it, the error will be disregarded, but there is a well-established exception to this rule where the evidence has irreparably damaged the appellant's case in the minds of the jury. This exception to the general rule and the importance of time as an element in the application of the exception are well illustrated in *Maytag* v. *Crimmins*, 260 F. 74, in which Judge Sanborn wrote the opinion. The trial of that action occupied five days. During several days, testimony was admitted erroneously. At the close of the trial, however, the court struck the testimony and directed the jury to disregard it. After stating the general rule, Judge Sanborn stated:

> "But there is an exception to this rule. It is that, where the appellate court perceives from an examination of the record that the inadmissible evidence made such a strong impression upon the minds of the jury that its subsequent withdrawal or the instruction to disregard it probably failed to eradicate the injurious effect of it from the minds of the jury, there the defeated party did not have a fair trial of his case, and a new trial should be granted. Waldron v. Waldron, 156 U. S. 361, 381, 383, 15 Sup. Ct. 383, 39 L. Ed. 453; Armour v. Kollmeyer 161 Fed. 78, 88 C. C. A. 242, 16 L. R. A. (N. S.) 1110; Chicago, Milw. & St. Paul Ry. Co. v. Newsome, 174 Fed. 394, 396, 98 C. C. A. 1; Knickerbocker Trust Co. v. Evans, 188 Fed. 549, 566, 567, 110 C. C. A. 347. This case clearly falls under the exception.
>
> "The record in this case discloses the fact that much immaterial and irrelevant evidence, aside from the testimony relative to the repetitions, rumors, and reports of the slander, was introduced in evidence before the jury, and that for several days a great mass of evidence on the latter subject was daily accumulating in their hearing under the erroneous first ruling of the court upon this subject. The result of this trial was a verdict against the defendant in this action for slander for the unusually large sum of $22,500. A careful review of the record leaves no doubt that the immaterial and irrelevant matter introduced in evidence before the jury made so strong an impression upon their minds that its evil effect was not and could not be eradicated by the court's attempted withdrawal and its instruction to disregard it, and that this irrelevant matter enhanced the amount of the verdict and deprived the defendant of a fair trial."

Judge Stone in a concurring opinion agreed as follows:

> "I concur in the result because I agree that the evidence of repetition in this case was such that under

> the present circumstances its effect could not be removed from the jury even by the clear, forcible charge of the court, and this left in their minds the effect of the evidence with no aid in properly considering it from the court through the charge, or counsel through argument."

There is a presumption of harm. The complaining party is not required to prove that the inadmissible evidence did in fact influence the verdict. The effect of such error, particularly in that regard, is ably discussed by the late Judge McDermott of the 10th Circuit Court of Appeals in the case of *Little* v. *U. S.*, 73 F. 2d 861. The question arose in connection with the Amendment of February 26, 1919, to Section 260 of the Judicial Code (28 USCA 391), from which Rule 61 of the Federal Rules of Civil Procedure in part was taken. After citing many cases in which the effect of the amendment is discussed, Judge McDermott concludes as follows:

> "We conclude that where the entire record affirmatively discloses that an error has not affected the substantial rights of an appellant, it will be disregarded. But where error occurs which, within the range of a reasonable possibility, may have affected the verdict of a jury, appellant is not required to explore the minds of the jurors in an effort to prove that it did in fact influence their verdict. The record failing affirmatively to disclose that no prejudice did result, the verdict cannot stand."

In a similar situation, Judge Valliant of the Supreme Court of Missouri, after stating the facts in the case of *Seafield* v. *Bohne,* 169 Mo. 537, 69 S. W. 1051, said:

> "It will be noticed that during the progress of the trial evidence was offered to which objections were interposed, and the Court made no ruling but heard the evidence 'subject to the objection'. This is a very unsatisfactory course. In this case the record does not show that the court ruled on these reserved questions at all. So we do not know whether the evidence was

> fully weighed or rejected. But, even if rulings are announced before or at the time of announcing the findings, the practice is very unsatisfactory. We never know in such case what influence the evidence may have had while it was retained, even though in the end it was adjudged to be incompetent. A party whose objection is thus held in suspense does not know whether he is to introduce evidence on his part to combat that so offered, or to trust to the final rejection of the evidence of his adversary. It is bad practice and would be reversible error if the point were properly reserved by exception."

The St. Louis Court of Appeals in *Stone* v. *Fry*, 191 Mo. App. 607, 178 S. W. 289, held:

> "When an objection was made to incompetent evidence, it was reversible error for the court to refuse to rule on the objection at that time; it not appearing that he subsequently ruled on it or that he did not consider the evidence."

In the case of *Hawman* v. *McLean et al.*, 139 Mo. App. 429, 122 S. W. 1094, the Kansas City Court of Appeals held that:

> "A trial court may very properly grant a new trial because of the admission of improper evidence though it attempted to withdraw the evidence by an instruction."

That ruling is based upon a portion of the opinion reading as follows:

> "We think a trial court can very properly grant a new trial in some circumstances though it does attempt to withdraw such evidence by instruction. The court could well conclude that material injury had been done by allowing such evidence to be heard which could not be cured by withdrawing it."

In the case of *King* v. *Chicago, Milw. & St. Paul Railway Co.*, 138 Ia. 625, 116 N. W. 719, the Supreme Court of Iowa states:

> "It often happens that a ruling made to correct a prior erroneous one does not have that effect for the

> reason that the virus has already entered the jurors' minds and can not be eliminated by a subsequent ruling."

The exception to the general rule has been recognized by the Courts of the District of Columbia since 1882 when Judge Cox in the case of *Moore* v. *Langdon et al.*, 2 Mackey 127, after describing inadmissible evidence which had been erroneously admitted before the jury, said:

> "We are unable to see any ground upon which the evidence could have been properly admitted and as it was calculated to create a decided influence on the minds of the jury, we think the verdict should be set aside."

Point 2.

The Court Erred in Overruling Appellant's Motion for a Directed Verdict, and the Result in the Case is Unjust, Contrary to the Evidence, the Weight of the Evidence and to the Law.

When this case was tried in the District Court, this court had not decided the case of *Ehret Magnesia Manufacturing Company, Inc.* v. *Gothwaite,* U. S. App. D. C., Case No. 8868 (decided May 21, 1945). We think the law of that case is controlling, and that if that decision had been available to the trial judge, there not only would have been a prompt ruling on the question of whose duty it was to protect the insulation but also, appellant's motion for a directed verdict would have been granted.

There was no conflict in the evidence as to the nature and extent of the obligations assumed by the appellee. The appellee's proposal was that it would furnish the insulated pipe required outside, underground, "in accordance with plans and specifications and as detailed in this offer" (Ex. 6).

The plans (Exs. 7, 8 and 9) provided: "The Manufacturer of the underground equipment shall guarantee the installation of his equipment" (Ex. 7).

"M E-25. Underground Piping: * * * In any event the lines shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety (90) percent or more, * * * The underground installation shall be made in accordance with the Manufacturer's recommendations and shall be completely waterproof * * *" (Ex. 5).

The specifications (Exs. 1, 4) provided, among other things:

* * * * * * * * *

> "1-02. Work to be Done.— * * *
>
> * * * The system shall be delivered complete in perfect working order, * * *
>
> "1-04. Commencement, Prosecution and Completion.—(a) The contractor will be required to commence work under the contract within ten (10) calendar days after the date of receipt by him of notice to proceed, to prosecute the said work with faithfulness and energy, and to complete the entire work within one hundred (100) calendar days, time being reckoned from the date on which he receives notice to proceed.
>
> (b) The time limit for completion shall be inclusive of all time allotted, specified, or required for the testing, inspection and adjustment of the material and equipment furnished and erected as a part of the contract.
>
> (c) In case of failure on the part of the contractor to complete the work within the time as stated above, plus any extension of time granted under the contract, the contractor shall pay to the Government as liquidated damages the sum of Sixty Dollars ($60.00) for each calendar day of delay until the work is completed and accepted.

* * * * * * * * *

> 1-06. Organization, Plant and Construction Charts.—The contractor shall within seven days after issuance of notice to proceed, prepare and submit to the contracting officer for approval a practicable and feasible schedule showing the order in which the contractor proposes to carry on the work, the dates on which he will start the several salient features (including procurement of materials, plant and equipment)

> reason that the virus has already entered the jurors' minds and can not be eliminated by a subsequent ruling."

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> "We are unable to see any ground upon which the evidence could have been properly admitted and as it was calculated to create a decided influence on the minds of the jury, we think the verdict should be set aside."

Point 2.

The Court Erred in Overruling Appellant's Motion for a Directed Verdict, and the Result in the Case is Unjust, Contrary to the Evidence, the Weight of the Evidence and to the Law.

When this case was tried in the District Court, this court had not decided the case of *Ehret Magnesia Manufacturing Company, Inc.* v. *Gothwaite,* U. S. App. D. C., Case No. 8868 (decided May 21, 1945). We think the law of that case is controlling, and that if that decision had been available to the trial judge, there not only would have been a prompt ruling on the question of whose duty it was to protect the insulation but also, appellant's motion for a directed verdict would have been granted.

There was no conflict in the evidence as to the nature and extent of the obligations assumed by the appellee. The appellee's proposal was that it would furnish the insulated pipe required outside, underground, "in accordance with plans and specifications and as detailed in this offer" (Ex. 6).

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The specifications (Exs. 1, 4) provided, among other things:

* * * * * * * * *

> "1-02. WORK TO BE DONE.— * * *
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> * * * The system shall be delivered complete in perfect working order, * * *
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> "1-04. COMMENCEMENT, PROSECUTION AND COMPLETION.—(a) The contractor will be required to commence work under the contract within ten (10) calendar days after the date of receipt by him of notice to proceed, to prosecute the said work with faithfulness and energy, and to complete the entire work within one hundred (100) calendar days, time being reckoned from the date on which he receives notice to proceed.
>
> (b) The time limit for completion shall be inclusive of all time allotted, specified, or required for the testing, inspection and adjustment of the material and equipment furnished and erected as a part of the contract.
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> (c) In case of failure on the part of the contractor to complete the work within the time as stated above, plus any extension of time granted under the contract, the contractor shall pay to the Government as liquidated damages the sum of Sixty Dollars ($60.00) for each calendar day of delay until the work is completed and accepted.

* * * * * * * * *

> 1-06. ORGANIZATION, PLANT AND CONSTRUCTION CHARTS.—The contractor shall within seven days after issuance of notice to proceed, prepare and submit to the contracting officer for approval a practicable and feasible schedule showing the order in which the contractor proposes to carry on the work, the dates on which he will start the several salient features (including procurement of materials, plant and equipment)

and the contemplated dates for completing the same. The schedule shall be in the form of a progress chart of suitable scale so as to indicate appropriately the percentage of work scheduled for completion at any time. The contractor shall enter the actual progress at the end of each week and shall immediately deliver to the contracting officer three blue print copies of the same.

The contractor shall furnish sufficient forces, construction plant and equipment, and shall work such hours, including night shifts and Sundays and holiday work as may be necessary to insure the prosecution of the work in accordance with the approved progress schedule. If, in the opinion of the contracting officer, the contractor falls behind the progress schedule, the contractor shall take such steps as may be necessary to improve his progress and the contracting officer may require him to increase the number of shifts, days of work and/or the amount of construction plants, all without additional cost to the Government.

* * * * * * * * *

1-09. PAYMENT.—(a) * * *

(b) All material and work covered by partial payments shall thereupon become the property of the Government, but this provision shall not be construed as relieving the contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made, or the restoration of any damaged work, or as a waiver of the right of the Government to require the fulfillment of all of the terms of the contract.

* * * * * * * * *

1-10. WORK COVERED BY CONTRACT PRICE.—The contractor shall, under his contract prices, furnish and pay for all material and labor and all permanent, temporary and incidental work, furnish all accessories, including all collateral expenses, and do everything which may be necessary to carry out the contract in good faith, which contemplates all parts, works and structures completed, in good working order, of good materials, with accurate workmanship, skillfully fitted and properly connected and put together.

* * * * * * * * *

1-22. STORAGE OF MATERIAL.—All materials, supplies, parts and assemblies thereof, delivered at the site to be incorporated in the work, shall be adequately housed, or otherwise protected against deterioration and damage, to the satisfaction of the contracting officer, and shall be stored so as to permit prompt inspection. When material stored at the site is not adequately protected by the contractor, such material will be kept protected by the contracting officer at the expense of the contractor, and no further payments will be made thereon.

* * * * * * * * *

1-26. STANDARD PRODUCTS AND GUARANTY.— * * *

All articles, supplies equipment, parts, and assemblies thereof of standard manufacture, or for which detail design or requirements are not prescribed in these specifications, shall be guaranteed by the contractor against any failure in proper use or operation, caused by defective material, workmanship, or design, for a period of at least one year from the date of final acceptance of the complete work under this contract. Failure in any part due to such causes within that time shall be properly and satisfactorily remedied without cost to the United States. This guaranty shall remain in full force and effect until one year after the completion, to the satisfaction of the contracting officer, of tests and acceptance of the machinery and equipment as contemplated by these specifications." (Exs. 1, 4)

* * * * * * * * *

The principal contract provided, among other things:

"ARTICLE 6. *Inspection.* (a) * * * The Government shall have the right to reject defective material and workmanship or require its correction. Rejected workmanship shall be satisfactorily corrected and rejected material shall be satisfactorily replaced with proper material without charge therefor, * * * If the contractor fails to proceed at once with the replacement of rejected material and/or the correction of defective workmanship the Government may, by contract or otherwise, replace such material and/or correct such workmanship and charge the cost thereof to the contractor, * * *" (Ex. 4).

In its progress schedule submitted May 22, 1942 to the U. S. Engineers, the appellee stated:

> "We acknowledge receipt of your telegram of the 22nd instant. We take pleasure in assuring you that we are in a position to deliver the Durant Insulated Pipe for this project in time to enable Crockett Engineering Company to complete within the contract period.
>
> "Our plan would be to start delivery on June 8, beginning with the 8″ supply line starting at the Boiler House, and complete delivery not later than July 31; deliveries to be made in truckload lots weekly, during the period June 8, to July 31, so that when the last lot is delivered, the lines previously delivered should have been installed, leaving only the last load to be installed during the remaining 16-day period and clean up such other work as is necessary under the contract.
>
> "We hope this delivery schedule is entirely satisfactory to you and that this assurance will make it unnecessary to use any other type of material." (Ex. 13)

The undisputed evidence proved: There were delays in the delivery of piping. The first load was delivered June 25 and the last on October 1, 1942 (Ex. 18, App. 91, 102, 103, 165, 167). The first delivery was of the wrong size pipe. It was 4″ instead of 8″ pipe (App. 121, Ex. 18). Some of the insulation and waterproofing were in bad condition when delivered to the job (App. 78, 114, 115, 209). When the pipe was delivered the ends of the magnesia insulation were exposed to the weather (App. 147, 178, Ex. 28). The joints where the blocks of magnesia insulation came together were not staggered as required by the contract (App. 58, 59). The insulation was not of the thickness required by the contract (App. 61). The waterproofing was not of the thickness required by the contract and was irregular (App. 62, 78, 126, 127, 128, 143, 144). The waterproofing did not have a high melting point as required by the contract (App. 62, 63, 191, 192). The appellee was guilty of long delays in completing the installation of the insulation and waterproofing after the sections of pipe had been placed in the trench, welded and tested, and did not put a sufficient number of experienced asbestos workers on the job to keep up with the progress of the job (App. 115, 121, 123, 124, 134, 140). The appellee used ordinary plasterers to complete the installation of the insulation and waterproofing in the so-called field joints (App. 64, 65, 125). In the expansion loops the waterproofing was poured improperly in that the space provided for waterproofing was not poured full. The waterproofing was not sufficiently hot and liquid at the time of the pouring and the joints at the expansion loops were not properly made so that the waterproofing ran inside thereof and next to the piping instead of remaining in the chamber or space within which it was supposed to remain (App. 65, 66).

It was admitted that appellee did nothing to protect its insulation from the weather, and there was no dispute about the fact that much of it got wet and damaged before the appellee completed its installation of the insulation and waterproofing.

The correspondence between the parties (Exs. 10-17, 19-19A-19 I, 23, 24), the delivery invoices (Ex. 18) and field reports of the U. S. Engineers' office (unnumbered exhibits) disclose the desperate situation that was created during the course of the job by the appellee's miserable non-performance of the obligations it had undertaken.

There was no conflict in the evidence that the work condemned by the U. S. Engineers was exclusively the work undertaken and guaranteed by the appellee; that the work was defective; that it had to be removed and done over; that appellee was requested to remove and do it over and refused; that it was removed and done over by appellant at a cost of $19,915.06.

When the appellee undertook by subcontract to do a portion of the contract work according to the plans and specifications provided by the United States and binding on the appellant as the principal contractor, such plans and specifications became a part of the apellee's contract, at least to the extent that the appellee assumed the obligation of the appellant in relation to the particular part of the work that appellee performed. *Ehret Magnesia Manufacturing Company, Inc.* v. *Gothwaite, supra.*

Undoubtedly, if appellee agreed to do certain things and to produce certain results, and to guarantee certain results, in accordance with and as required by the terms of the contract, plans and specifications, appellant was entitled to rely upon these representations and agreements of the appellee and they were binding on the latter. *Ehret Magnesia Manufacturing Company, Inc.* v. *Gothwaite, supra.*

Aside from the undisputed proof of many breaches of contract on the part of the appellee, the obligations assumed by the appellee in relation to the insulation and waterproofing were in nature absolute and unconditional. The appellee was absolutely and unconditionally under obligation to produce certain results and to guarantee certain results. There was no dispute that the required results were not produced, (App. 238) and, therefore, it was the appellee's duty to remove and replace the insulation and waterproofing.

The appellee's answer did not disclose the full nature and extent of its defense, but the appellee's evidence and prayers for instructions to the jury made a more complete disclosure. First, it was claimed that the appellant had not protected the magnesia insulation from the weather. This was an unfounded claim, it having been the duty of the appellee and not the appellant to protect it. Secondly, the appellee contended that the appellant had failed to follow the recommendations of the appellee in making the underground installation. Analysis of the evidence discloses that the appellee's recommendations were (1) not to let the magnesia insulation get wet; (2) to put temporary steam on the line to dry out the magnesia; (3) to put vents in for the same purpose, and (4) to make a partial backfill to prevent further damage to the insulation and waterproofing from the temporary steam put on the line before the field joints were completed. Each and all of these recommendations emanated either from the appellee's contention that it was the appellant's duty to protect the insulation from the weather or from the appellee's failure to perform its duty in that regard. They constituted nothing more than an effort on the part of the appellee to impose upon the appellant the duty and responsibility of the appellee to protect the magnesia insulation from the weather and to correct any damage resulting from the appellee's failure to protect it. Thirdly, the appellee claimed that the appellant's alleged negligence consisted in proceeding to lay the piping without due regard to the reasonable and proper progress of the appellee in sealing the field joints. Enough of the evidence has been set forth in this brief to show that there was no evidence to support this claim. This claim amounted to nothing more than a contention that the terms of the contract covering the progress of the job and fixing the time for its completion were not binding. The evidence showed that the appellant proceeded to lay the piping under normal conditions and with every reason to expect that the appellee would keep the progress of its work up with the progress of the appellant's work. The appellee failed to do so. Rains intervened. The insulation on the piping that had been laid got wet and damaged. The nature of the system used by the appellee for insulating and waterproofing the piping was such that it was beyond human power to prevent the insulation from getting wet and damaged unless the installation of the field joints had been completed before the rains came and the trenches got full of water. There was not a scintilla of evidence that the appellant ever laid piping during inclement weather. The piping was laid in good weather. Rains came after the time the appellee should have completed the installation of the insulation and waterproofing. Fourthly, the appellee's defense that the condemnation was due solely and entirely to negligence on the part of the appellant was based on the claim that the appellant had sealed some of the field joints. Although the evidence showed that the appellant placed workers on the job to make field joints (App. 92, 93), the undisputed evidence showed exactly what joints they made, and that some of the joints they had made were torn out by the appellant so that appellant could not be held responsible for any defects in the joints. (App. 93-95).

Each and all of the elements involved in the appellee's defense presupposed that all the insulation and waterproofing on the steam line was a single unit. This was an erroneous supposition because the undisputed evidence proved that the insulation and waterproofing did not continue or extend through the manholes. Some of the witnesses described the fact by simply stating that the insulation broke contact *at every manhole*. In consequence, the insulation and waterproofing between any two manholes represented a unit of insulation and waterproofing, so that if a mistake or negligence occurred between two certain manholes, it would not affect the insulation and waterproofing between any other manholes. (Exs. 7, 8 and 9, App. 74, 75). Moreover, the supposition ignored the undisputed fact that from manhole "F" to the officers mess building, the piping was laid, welded, tested and the field joints were made under favorable conditions, weather and all. Nothing occurred between those two points that the appellee could possibly have blamed on the appellant. (App. 126, 127, 217). Nevertheless, this part of the line was condemned too.

The theory of the appellee's defense was that if the appellant's negligence caused damage to any insulation and waterproofing, the appellant became responsible for the condemnation of all the insulation and waterproofing and could not recover anything from the appellee. That this was the theory of the appellee's defense is best illustrated by the appellee's prayers for instructions to the jury. The theory was an erroneous one.

If the appellant was negligent in any way and thereby caused damage to any insulation and waterproofing, the appellee, of course, would have had counterclaims against the appellant, but such negligence on the part of the appellant would not wholly relieve the appellee of responsibility for the work it agreed to do or the result it agreed to produce and guarantee.

In view of the foregoing, it is respectfully submitted first, that the court erred in overruling appellant's motion for a directed verdict, and secondly, that if it can be said that as to the insulation and waterproofing on certain portions of the line the evidence was in conflict, nevertheless, the evidence relating to other portions of the line was undisputed, and a result that denied the appellant any recovery at all is contrary to the evidence, the weight of the evidence and to the law.

Point 3.

The Court Erred in Granting Appellee's Requests for Instructions Numbered 3 and 5.

As requested by the appellee, the prayers complained of were as follows:

> "DEFENDANT'S PRAYER NO. 3.
>
> "The jury is instructed that it was the duty of the plaintiff to make the underground installation in accordance with the recommendations of the defendant, and if you find that plaintiff failed so to do and as a result the material became damaged, your verdict shall be for the defendant."
>
> "DEFENDANT'S PRAYER NO. 5.
>
> "If you find that the plaintiff proceeded to lay the piping without due regard to the reasonable and proper progress of the defendant in sealing the joints, and as a result thereof the piping became damaged, the defendant is not liable for such damage." (App. 248).

When read to the jury the last phrase in defendant's prayer No. 5 was changed to read as follows:

"then your verdict should be for the defendant."

Before considering either of the instructions complained of, two undisputed facts should be noted; first, that the insulation and waterproofing broke contact *at every manhole*, so that damage done between any two manholes would not cause damage between other manholes, and second, that from manhole "F" to the officers mess building nothing occurred that the appellee could possibly have blamed on the appellant. These two undisputed facts are more fully shown on page 22 of this brief.

Under these two instructions, the jury, if it found that the appellant, between the first two manholes or any other two manholes had failed to follow a recommendation of the appellee or had proceeded to lay the piping without due regard to the reasonable and proper progress of the appellee in sealing the joints, and, as a result of either, the material used there was damaged, was instructed to deny any recovery at all. Obviously, the instructions were too broad. They instructed the jury to consider the insulation and waterproofing on the whole line as a single unit rather than as many units or on a manhole to manhole basis or a manhole to building basis as these two undisputed facts required.

The third prayer was erroneous for other reasons. The insulation and waterproofing and the installation thereof were exclusively within the obligations assumed by the appellee, but this instruction told the jury that the appellant had duties in relation thereto without defining what the appellant's duties were.

What is meant by "duty of the plaintiff to make the underground installation in accordance with the recommendations of the defendant"? This instruction did not inform the jury. Appellant thinks that it means the installation of the insulation and waterproofing and nothing more. If this is what the jury understood the instruction to mean, then they could have been and were probably misled by this instruction. It told the jury that the appellant had duties and obligations that were clearly those of the appellee and failed to tell the jury that these duties and obligations were the appellee's, or at least were the appellee's as well as the appellant's. The instruction was based on a misconception of the provision of the specifications that "The underground installations shall be made in accordance with the manufacturer's recommendations." This provision of the specifications contemplated the possibility of someone other than the manufacturer making the installation. For example, someone might buy the material from the manufacturer and make the installation. But whoever undertakes the job of installing the insulation and waterproofing must make the installation in accordance with the manufacturer's recommendations. In this case the manufacturer itself (the appellee) undertook the installation and the duty was on it to make the installation in accordance with its own recommendations.

Moreover, the mere fact that the material became damaged as a result of appellant's failure to follow some recommendation of the appellee did not require a verdict for the appellee *unless the jury further found that it was as a result of such damage to the material that all the insulation and waterproofing failed and was condemned* and ordered removed and replaced by the United States Engineers Office, but appellee's instruction numbered 3 failed to so instruct the jury.

The fifth prayer was also erroneous for other reasons. It was the duty of the appellee to keep the progress of its work up with the progress of appellant's work; it was not the duty of appellant to slow down the progress of its work to the progress of appellee's work. The contract established a progress schedule and fixed a time limit for completion of the job and provided for substantial liquidated damages for each day's delay in its completion. (See excerpts, exhibits 1 and 4, section 1-06, pp. 15 to 16 of this brief).

This instruction, in effect, told the jury that appellee was not bound by the provisions of the specifications and that appellee had a right to control the progress not only of its own work but also the progress of appellant's work.

Moreover, the mere fact that the piping became damaged as a result of the appellant proceeding to lay the piping without due regard to the reasonable and proper progress of the appellee in sealing the joints did not require a verdict for the appellee unless the jury further found that it was as a result of such damage to the piping that all the insulation and waterproofing failed and was condemned and ordered removed and replaced. Instruction numbered 5 failed to so instruct the jury.

Point 4.

The Court Erred in Denying Appellant's Request for Instruction Numbered 7.

Appellant excepted to the court's denial of its request for instruction numbered 7 reading as follows:

> "The burden of proof is on the defendant to prove its charge that the condemnation of the waterproofing and insulation on the underground steam line by the United States Engineers' Office, if any, was due solely and entirely to the plaintiff's own negligence."

The defense that the condemnation of the waterproofing and insulation on the underground steam line by the United States Engineers Office was due solely and entirely to the appellant's own negligence was an affirmative defense. It amounted to a plea of confession and avoidance. It confessed the condemnation and attempted to avoid it by asserting that it was due solely and entirely to appellant's own negligence. We submit that the burden of proof as to this defense was on the appellee. IX Wigmore (Third Ed.) Sec. 2486, p. 274; *Lake Shore, etc. Ry. Co.* v. *Felton*, 103 Fed. 227, 230; *Robinson, Norton & Co.* v. *Tuscaloosa Mills*, 183 Fed. 966; *Ocean Accident & Guaranty Corp.* v. *Rubin*, 73 F. (2d) 157, 166; *United American Fire Insurance Co.* v. *American Bonding Company*, 146 Wis. 573, 131 N. W. 994; *Drouin* v. *Wilson*, 80 Vt. 335, 67 Atl. 825.

In *Tradesmans National Bank of Oklahoma* v. *Harris*, 145 Okla. 54, 291 Pac. 38, the Court held that the burden of proof is upon the plaintiff to establish the issues upon which he relies for a recovery, and is upon the defendant to establish the affirmative defenses relied upon by him to defeat the recovery.

In the case of *Drouin* v. *Wilson, supra,* the Court, in fixing the burden of proof in an action on a contract wherein the defendant pleaded performance, held:

> "A plea of performance admits all matters that are well alleged, and assumes the burden of proving performance."

In *Boone* v. *Collins,* 202 N.C. 12, 161 S.E. 543, the Court said:

> "The rule as to the burden of proof constitutes a substantial right and its erroneous placing is reversible error."

In *Robinson, Norton & Co.* v. *Tuscaloosa Mills, supra,* the facts were as follows:

> "The plaintiff sues for $3,310.13, alleging that it paid that sum to the defendant for goods which the defendant was to manufacture and deliver to the plaintiff, and that the defendant failed to deliver the goods, and refuses to return the money. The plea that states the defendant's only defense, as shown by the evidence offered, admits the receipt of the money, admits the agreement to manufacture and deliver goods for the money, and admits that the money has not been returned. These admissions are coupled with the affirmative defense that the goods were manufactured, set aside for the plaintiff, notice of the fact given plaintiff, and that subsequently, without defendant's fault, the goods were destroyed by fire."

The court said:

> "The real issue to be tried was the truth of the defensive statements in this plea. . . . On this issue the burden of proof was on the defendant. This is so for three reasons: (a) The defendant makes the affirmative defensive allegation; (b) it relates to a matter

> especially within the defendant's knowledge, the proof of which was necessary and essential to the defendant's defense; and (c) the plaintiff had made proof of a prima facie case, which, if not admitted by the pleadings, was undisputed by the evidence, excepting, of course, the evidence offered in support of the new matter pleaded. . . . And the court refused to charge, at the request of the plaintiff, that the burden of proof was on the defendant to show that the goods were separated and set aside. These charges were not asked, nor would they be understood by the jury to apply to the prima facie case made by the plaintiff. That was undisputed, except by the evidence offered in support of the new matter pleaded. The charges would be understood as applying to the defensive averments of the plea.
>
> "We are of opinion that the giving of the defendant's requested charge and the refusal of the charge asked by the plaintiff was error, in view of the pleadings and the evidence on which the issue was submitted to the jury.
>
> "The judgment is reversed, and the cause remanded for a new trial."

In *Ocean Accident & Guaranty Corporation, Ltd.* v. *Rubin,* 73 F. 2d. 157, the court holds that the burden of proving an affirmative defense rests on the defendant.

In *White* v. *Clarke,* 5 Cranch C.C. (5 D.C.) 102, the Supreme Court of the District of Columbia held that if the answer of the defendant admits a fact alleged in the bill, but insists on a matter of avoidance, the complainant need not prove the fact admitted, but the defendant must prove the matter in avoidance. This decision was affirmed by the U. S. Supreme Court in *White* v. *Clarke,* 37 U.S. 178.

CONCLUSION.

It is respectfully submitted that the judgment should be reversed.

Earl W. Shinn,
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Attorneys for Appellant.

APPENDIX

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IN THE

United States Court of Appeals

DISTRICT OF COLUMBIA.

No. 9036.

CROCKETT ENGINEERING COMPANY, a Maryland
Corporation, *Appellant,*

v.

EHRET MAGNESIA MANUFACTURING COMPANY, a
Pennsylvania Corporation, *Appellee.*

Appeal from the District Court of the United States for the District of Columbia.

JOINT APPENDIX.

I.

PLEADINGS, DOCKET ENTRIES AND OTHER PAPERS.

1 Filed Nov 16 1943

District Court of The United States
For The District of Columbia

Crockett Engineering Company, 4721 Elm St., a Maryland Corporation, Bethesda, Maryland, *Plaintiff,*

v.

Ehret Magnesia Manufacturing Company, 312 7th St., N. W., a Pennsylvania Corporation, Washington, D. C., *Defendant.*

Complaint for Breach of Contract.

1. Jurisdiction is fonded on the general jurisdiction of the Court.

2. The plaintiff is a corporation organized and existing under and by virtue of the laws of the State of Maryland, and the defendant is a corporation organized and existing under and by virtue of the laws of the State of Pennsylvania, doing business in the District of Columbia through its duly authorized agent Charles B. Droba, whose office is at 312 Seventh Street, Northwest, in the City of Washington. The amount in controversy, exclusive of interest and costs, exceeds the sum of Three Thousand Dollars ($3,000.00).

3. On or about the 23rd day of April, 1942, plaintiff was notified in writing by the Corps of Engineers of the U. S. Army that its bid in the amount of $84,165.00 for equipping and installing a Vacuum Steam Distribution System 2 at the Army War College, Washington, D. C., in accordance with specifications, schedules and drawings thereunto supplied, had been accepted; and thereafter, and on the 11th day of May, 1942 a formal contract, copy of

which is hereto attached, marked Exhibit 1 and by reference made a part hereof, was executed by and between the plaintiff and the United States of America covering the terms and conditions agreed upon.

4. On or about April 21, 1942, the plaintiff secured from, and duly accepted, the written proposal of the defendant to furnish insulated pipe required outside, underground for the steam distribution system at the Army War College, in accordance with the plans and specifications applicable thereto, for the sum of $49,000.00, including steel pipe for supply and return, said proposal including:

(a) All the necessary standard weight steel and wrought iron pipe;

(b) The insulation, asphalt and casing to insulate the field joints, that is, where the lengths of pipe are joined together in the field; said field joints not to exceed 18″ in length.

(c) Labor installing the field joints above referred to.

(d) The pipe and welding ells making up the expansion loops.

Defendant further agreed to begin delivery within four (4) weeks from receipt of pipe and to complete delivery within sixty (60) days. Copy of said proposal is hereto attached, marked Exhibit 2 and by reference made a part hereof.

5. Plaintiff has paid to the defendant the sum of $49,000.00 as aforesaid, and all other sums due defendant under the terms of said agreement dated April 21, 1942.

3 6. Among other things the specifications provide:

"ME-25. Underground Piping: Where underground lines are indicated on the drawings or are required, such lines shall be properly encased in an approved conduit or waterproof trench. If the lines are installed in a horizontally split conduit or trench, they shall be properly supported so as to maintain the desired grade hereinbefore specified. In any event the lines shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety (90) percent or more, and properly installed to allow for expansion and contraction without damage to any part of the installation. The underground installation shall be made in accordance with the manufacturer's recommendations, and shall be completely waterproof. Underground lines one and one-half (1½) inches or larger shall be welded. Expansion joints shall be installed in manholes, and connections made as indicated on the drawings."

7. Insofar as is pertinent to this cause of action, said plans provide as follows:

"The manufacturer of the underground equipment shall guarantee the insulation of his equipment."

The defendant is the manufacturer of said equipment.

8. In acocrdance with the terms of the agreement or proposal aforesaid, the defendant proceeded with the installation and insulation of said underground steam line; but the defendant wholly failed to carry out the terms of said agreement or perform said work in accordance with the drawings or specifications, in the particular respects among others as follows, to-wit:

(a) The pipe was not delivered according to schedule so that the progress of the project was unreasonably delayed.

(b) The underground installation was not made in accordance with manufacturer's recommendations.

(c) The field joints were neither properly made nor properly installed.

(d) The said steam line did not obtain a thermal efficiency of ninety (90) percent.

4 9. Because of the failure of the defendant to perform its work in accordance with plans and specifi-

cations as hereinbefore set forth, approximately 2,100 lineal feet of said steam line was condemned by the U. S. Engineers for the reason that said steam line failed to obtain a thermal efficiency of ninety (90) percent or more; and plaintiff was ordered to replace same as required by the terms of its contract with the United States of America.

10. Thereupon plaintiff made repeated demands upon the defendant to place said portion of said steam line so condemned in the condition prescribed in said specifications but defendant failed and refused so to do.

11. The plaintiff, in accordance with guarantees contained in his contract with the United States of America as aforesaid proceeded to and did replace said 2,100 feet of underground steam line at a cost to it of $19,915.06, the fair and reasonable value of said operation.

12. Because of the failure of the defendant to perform its contract in the manner and form as undertaken and guaranteed, said plaintiff has suffered a loss of $19,915.06 for which claim is hereby made. Demand has been made for the payment thereof but defendant has wholly failed and refused to pay same.

Wherefore, and in view of the above and foregoing plaintiff prays for judgment against the defendant in the amount of $19,915.06, together with interest at the rate of six percent (6%) per annum from the first day of December, 1942, and for the costs of this action and for such other and further relief as to the Honorable Court seems just and equitable in the premises.

* * * * * * * * * *

6 Filed Jan 13 1944

Bill of Particulars.

I.

In defendant's proposal referred to in Paragraph 4 of the Complaint and as accepted by the plaintiff, the said defendant agreed to furnish and install the insulation of the said steam line in accordance with the plans and specifications. Said plans contained the provision that the manufacturer shall guarantee said insulation. Copy of said plans are hereto attached and marked Exhibit A, and by reference made a part hereof. The specifications provide, inter aila, that the "lines shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety (90) per cent or more". After said line had been insulated by the defendant pursuant to the terms of its contract with the plaintiff, said line failed to obtain a thermal efficiency of ninety (90) per cent or more.

II.

The field joints installed by the defendant were not properly made in the following respects, among others, to wit:

7 1. Said field joints were made by inexperienced labor.

2. Said joints were not properly joined to the insulation of the pipe units placed in the trench, nor were the magnesia blocks staggered.

3. At expansion bends where metal casings were used, expansion loops were filled with concrete, thereby permitting the waterproofing, when poured hot, to enter the expansion space of the loop.

III.

That part of said steam line condemned by the U. S. Engineers and consisting of approximately 2,100 lineal feet, as referred to in Paragraph 9 of the Complaint, extends from the boiler room to the pump room at the U. S. Army War College, Washington, D. C.

* * * * * * * * * *

8 Filed Jan 22 1944

Answer of Defendant to Complaint for Breach of Contract and Bill of Particulars.

First Defense.

The Complaint fails to state a claim against defendant upon which relief can be granted.

Second Defense.

(1) Defendant admits the jurisdiction of this Court.

(2) Answering paragraph two of the complaint defendant says he has no knowledge as to whether plaintiff is a corporation organized under and by virtue of the laws of Maryland. It admits the other allegations contained in paragraph two of the complaint.

(3) This defendant has no knowledge of the averments contained in paragraph three of the complaint but believes them to be true.

(4) Answering paragraph four this defendant says it admits that the copy referred to as "Exhibit 2" of the complaint is true and correct and in so far as the other allegations of said paragraph four refer to said "Exhibit 2" it also admits, but otherwise denies the allegations contained in said paragraph four.

(5) It admits the allegations contained in paragraph five of the complaint.

(6) It admits the allegations contained in paragraph six of the complaint.

(7) Answering paragraph seven of the complaint the defendant denies as alleged in paragraph seven of said
9 complaint that the plans provided as follows: "The

manufacturer of the underground equipment shall guarantee the insulation of his equipment''. Further answering paragraph one of the ''Bill of Particulars'' filed to the complaint, defendant admits that the specifications provided that the ''lines shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety (90) per cent or more''. It denies each and every other allegation contained in paragraph one of the ''Bill of Particulars'' filed herein by the plaintiff and having reference to paragraph seven of the complaint.

(8) Answering paragraph eight of the complaint defendant admits that in accordance with the terms of the agreement or proposal made by it to the plaintiff and referred to in the complaint as ''Exhibit 2'', the defendant proceeded with the installation and insulation of the underground steam distribution system as set forth in said proposal and in every respect complied therewith. It denies each and every other allegation contained in paragraph eight of the complaint, and further denies each and every allegation contained in paragraph two of the ''Bill of Particulars''.

(9) Answering paragraph nine of the complaint this defendant has no knowledge that plaintiff was ordered to replace the 2,100 lineal feet of steam line as alleged in paragraph nine of the complaint. It denies each and every other allegation contained in paragraph nine of the complaint.

(10) Answering paragraph ten of the complaint this defendant says that plaintiff did demand of the defendant to replace a portion of the steam line, but refused to do so because it was not responsible for any defect that may have occurred and may have been condemned by the United States Engineers. It further says that if any condemnation was made in the steam line, as alleged in paragraph ten of the complaint, such condemnation was not due to any fault on the part of the defendant but was solely due to
10 the fault of the plaintiff.

(11) This defendant has no knowledge of the truth or falsity of the averments contained in paragraph eleven, but if material to this case, it demands strict proof. It denies that the sum of $19,915.06 as alleged in paragraph eleven of said complaint is a fair and reasonable value.

(12) This defendant admits that demand has been made upon the defendant by the plaintiff to pay the sum as alleged in said paragraph twelve of the complaint, but refused to pay the same because defendant was in no way responsible therefor. This defendant denies each and every other allegation contained in paragarph twelve of the complaint.

Third Defense.

This defendant says that any failure on the part of the plaintiff to perform its contract with the United States Government or any branch thereof was due entirely to plaintiff's own fault or negligence and in no wise to any acts or omission or commission whatever of this defendant.

Fourth Defense.

This defendant says that in no wise did the materials, labor or installation made by it in connection with its contract with the plaintiff fail or become defective or deteriorate but if the same did fail or otherwise become defective or deteriorate such was due to the plaintiff's fault, negligence or omission.

Wherefore, the defendant having fully answered, prays that the complaint filed herein be dismissed with costs.

* * * * * * * * * *

13 **Stipulations.**

(1) That the defendant admit that plaintiff is a Maryland corporation.

* * * * * * * * * *

(6) That defendant agree that plaintiff may amend paragraph 7 of its Complaint and paragraph 1 of its Bill of

Particulars by changing the word "insulation" to the word "installation" and its Bill of Particulars, paragraph 2, by changing the word "concrete" to the word "asphalt".

14 (7) That the defendant admit or stipulate that it is the manufacturer of the equipment it furnished and delivered.

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389 Filed Dec 20 1944

Verdict and Judgment.

This cause having come on for hearing on the 13th day of December, 1944, before the Court and a jury of good and lawful persons of this district, to wit: George M. Haverstock, Walter Junge, Jessie D. Herbert, George Plummer, Jack S. Nance, Edward F. Brooke, Beth M. Ferguson, Ethel H. Lewis, George N. Haller, James L. Evans, Blondine V. McDowell, Leo F. Pass who, after having been duly sworn to well and truly try the issues between Crockett Engineering Co., a Maryland Corpn., plaintiff and Ehret Magnesia Manufacturing Company, a Penna. Corpn., defendant and after this cause is heard and given to the jury in charge, they upon their oath say this 20th day of December, 1944, that they find for the defendant against said plaintiff.

Wherefore, it is adjudged that said plaintiff take nothing by this action that said defendant go hence without day, be for nothing held and recover of plaintiff its costs of defense. Jury polled.

CHARLES E. STEWART,
Clerk,
By R. PAGE BELEW,
Deputy Clerk.

By direction of
Justice JENNINGS BAILEY.

* * * * * * * * * *

398 Filed Apr 9 1945

Order Directing that Original Exhibits be sent to the United States Court of Appeals for the District of Columbia etc.

This action came on to be further heard at this term and thereupon, upon consideration of the plaintiff's motion to have the original exhibits sent to the United States Court of Appeals for the District of Columbia in lieu of copies thereof, it is, by the court, this 9th day of April 1945 adjudged as follows:

1. That the clerk of this court be and hereby is directed to send the original exhibits to the United States Court of Appeals for the District of Columbia in lieu of copies thereof.

2. That the clerk of this court may deliver the same to the clerk of said Court of Appeals with the transcript of record on appeal and obtain the return thereof when the mandate of said Court of Appeals has been filed in this court.

Matthew F. McGuire,
Justice.

* * * * * * * * * *

II.

EXCERPTS FROM TESTIMONY AND PROCEEDINGS.

18 Thereupon **Charles T. Crockett** was called as a witness for and in behalf of the plaintiff, and being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:

Direct Examination

By Mr. Hilland:

Q. Will you please state your full name? A. Charles T. Crockett.

19 Q. Will you please speak so the Court and ladies and gentlemen of the jury can hear you. A. My name is Charles T.. Crockett.

Q. Where do you live, Mr. Crockett? A. 6751 Glenbrook Road, Bethesda, Maryland.

Q. How long have you lived there? A. Twenty years. Not at the same address but I have been in Bethesda.

Q. You have lived in Bethesda for twenty years? A. Yes, sir.

Q. What is your occupation, Mr. Crockett? A. Heating contractor.

Q. How long have you been engaged as a heating contractor? A. Twenty-two years.

Q. In what place? Where have you been so engaged during these twenty-two years? A. My place of business was in Silver Spring for two years, but for the last twenty years I have been in Bethesda.

Q. And you are still located there? A. That is right.

Mr. Hilland: If your Honor please, I want to offer in evidence a form which has been marked by the pre-trial Judge, the standard Government form of invitation for bids on this project?

Is there any objection?

Mr. Fitzgerald: I have no objection.

The Court: Let that be marked in evidence.

(Thereupon the document referred to was received in evidence and marked by the reporter "Plaintiff's Ex-
20 hibit No. 1" and was returned to the hands of counsel offering it.)

Mr. Hilland: May I read certain portions of it to the jury?

The Court: Yes.

(Thereupon Mr. Hilland read Plaintiff's Exhibit No. 1 to the jury, as indicated.)

By Mr. Hilland:

Q. Now, Mr. Crockett, did you receive from the Government this standard Government form of invitation to bid, marked "Plaintiff's Exhibit No. 1"? A. I did.

Q. Did you place a bid pursuant to that invitation? A. In accordance with the request; that is right.

Q. Were you later notified by the United States Engineer's office——

The Court (interposing): Mr. Hilland, as I understand it, the plaintiff is a corporation?

The Witness: Yes, sir.

Mr. Hilland: Yes, sir.

By Mr. Hilland:

Q. When I say "you," I mean your corporation.

Mr. Crockett, you are the president of the plaintiff corporation? A. That is right.

Q. And the principal stockholder? A. That is right.

Q. And that is your company; is that right? A. Yes. I
am president of the Crockett Engineering Company
21 and sign all letters and checks.

Q. I will reframe that question.

The plaintiff did receive that invitation for bid? A. That is correct.

Q. And the plaintiff then placed a bid? A. That is right.

Q. Did you later receive a notification that your bid had been accepted? A. Yes.

Q. Can you identify this paper I hand you (handing a paper writing to the witness)? A. That is right.

Q. What is that? A. A notice to proceed.

Q. Is that the notice of acceptance that you received from the Government? A. Yes. You are hereby—

Q. (interposing) Did you receive that? A. From the United States Engineers; yes.

Mr. Hilland: I offer it in evidence, if your Honor please. I don't know how it didn't get marked at pre-trial.

Mr. Fitzgerald: May I see that?

Mr. Hilland: Yes.

Mr. Fitzgerald: I notice it is not signed. I assume that is a copy. Is it?

Mr. Hilland: That is a copy; yes.

Mr. Fitzgerald: I have no objection.

Mr. Hilland: Will you mark this as Plaintiff's Exhibit No. 2 please?

22 (Thereupon the document referred to was received in evidence and marked by the reporter "Plaintiff's Exhibit No. 2" and was returned to the hands of counsel offering it.)

Mr. Hilland: Will you mark this as Plaintiff's Exhibit No. 3?

You have no objection?

Mr. Fitzgerald: No.

(Thereupon the document referred to was received in evidence and marked by the reporter "Plaintiff's Exhibit No. 3" and was returned to the hands of counsel offering it.)

Mr. Hilland: Will you mark this as Plaintiff's Exhibit No. 4?

(Thereupon the document referred to was received in evidence and marked by the reporter "Plaintiff's Exhibit No. 4" and was returned to the hands of counsel offering it.)

Mr. Hilland: Will you mark this as Plaintiff's Exhibit No. 5?

Mr. Fitzgerald: I have no objection to that being introduced in evidence, but there are some pencil or pen marks indicating a paragraph there, if your Honor please, and I want to know from counsel—are you limiting that to that particular section?

Mr. Hilland: At this time, yes.

Now, this is a pamphlet, if your Honor please, as to Standard Specification for Temporary Housing that are referred to in the specifications which I have just read to the jury in Paragraph No. 1-03.

Right at this moment, the only part that is material is
the part we have outlined in pen, as indicated. That
23 is what I am offering now, but I would like to reserve
the right to introduce other parts if necessary.

Mr. Fitzgerald: What you are referring to is the same as paragraph 6 of the complaint?

Mr. Hilland: That is right.

Mr. Fitzgerald: I have no objection.

Mr. Hilland: Will you mark that now as Plaintiff's Exhibit No. 5?

(Thereupon the document referred to was received in evidence and marked by the reporter "Plaintiff's Exhibit No. 5" and was returned to the hands of counsel offering it.)

Mr. Hilland: Will you mark this as Plaintiff's Exhibit No. 6?

(Thereupon the document referred to was received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 6" and was returned to the hands of counsel offering it.)

Mr. Hilland: If your Honor please, I offer in evidence the exhibits marked for the plaintiff No. 2, 3, 4, 5, and 6.

The Court: Very well.

Mr. Hilland: Which I understand there is no objection to. May I read them to the jury?

The Court: Yes.

(Thereupon Mr. Hilland read Plaintiff's Exhibits Nos. 2, 3, 4, 5, and 6, to the jury, as indicated.)

Mr. Hilland: Here are the plans that were marked at pre-trial.

Mr. Fitzgerald: Are those the same plans?

Mr. Hilland: Yes; they are the same ones and they bear the same marks.

24 Mr. Fitzgerald: All right.

Mr. Hilland: If your Honor please, I want to offer in evidence these plans which bear the same numbers as those which I have written in the various exhibits, and I wonder if we could get these up on the blackboard where the jury can see them?

The Court: Yes.

(Thereupon the plans referred to were mounted on the blackboard as requested by Mr. Hilland.)

By Mr. Hilland:

Q. Mr. Crockett, I wonder if you could step down here and show us where these end here. It goes over here somewhere? A. This fills in here (indicating). In other words, when you read this, it goes this way (indicating).

The Court: Speak louder, please.

The Witness: When you read this, it goes this way.

This building—there is a pump room.

In this part the steam goes in through pumps in the building and is reduced from eighty pounds to ten pounds and comes out of that building.

Mr. Fitzgerald: Identify this building. Do you have a number on that?

The Witness: Yes. It is Building No. ORM 2.

By Mr. Hilland:

Q. Will you fasten this on here where it fits? A. It goes here (indicating).

Q. Will you have your seat again, Mr. Crockett? A. Yes.

Mr. Hilland: If your Honor please, in order to keep the record straight, I wonder if we might have the plans marked with the next exhibit numbers for the plaintiff?

The Court: Very well.

Mr. Hilland: Will you mark these Plaintiff's Exhibits Nos. 7, 8 and 9?

(Thereupon the documents referred to were received in evidence and were marked by the reporter "Plaintiff's Exhibit No. 7," "Plaintiff's Exhibit No. 8," and "Plaintiff's Exhibit No. 9" respectively.)

Mr. Hilland: Now, if your Honor please, from Plaintiff's Exhibit No. 7, I want to read from the heading on notes the last paragraph, which reads as follows:

The manufacturer of the underground equipment shall guarantee the installation of his equipment.

By Mr. Hilland:

Q. Mr. Crockett, who was the manufacturer of the underground equipment used there? A. Ehret Magnesia Manufacturing Company.

Q. And who undertook the installation of their equipment? A. Ehret undertook the installation.

Mr. Fitzgerald: I object to that on the ground that the fact here in the contract shows that the plaintiff was the installer of the material. The contract between the plaintiff and the defendant shows specifically what we are supposed to do and also what they are supposed to do. So I think I must object to that, if your Honor please because it is contrary to the evidence already in.

Mr. Hilland: If your Honor please, the contract is in evidence and shows that they undertook the installation of their equipment. There is the contract.

26 Mr. Fitzgerald: Now, are you talking about installation or insulation?

Mr. Hilland: Installation of the underground equipment.

Mr. Fitzgerald: The contract between the defendant and plaintiff of April 21, 1942, specifically states the fact what their price consists of.

Mr. Hilland: That is right.

Mr. Fitzgerald: Furthermore, and what they are supposed to do. They indicate their price does not include so and so and so and so. And says what we are not to do.

His statement is contrary to our contract, and if you don't elaborate on it it is just merely a conclusion.

Mr. Hilland: If your Honor please, in the interest of time, I will withdraw that question and that answer because we have to come to a full explanation of that whole subject matter.

The Court: Very well.

Mr. Hilland: I would like to offer in evidence this letter, Mr. Fitzgerald.

Mr. Fitzgerald: Yes.

Mr. Hilland: We have a stipulation which includes that carbon copy of correspondence which may be used.

Mr. Fitzgerald: I have no objection to that being introduced in evidence, if your Honor please, for what it is worth, but I can see what it is a self-serving declaration.

Mr. Hilland: I am only offering it for the purpose, if your Honor please, of showing that their proposition was accepted. That is what I want it for.

Mr. Fitzgerald: That is all right.

Mr. Hilland: Their proposal is part of the contract.

27 I also want to show that this was part of the understanding, part of the agreement, because this thing was sort of dragged out by correspondence until they finally got the contract accepted.

Mr. Fitzgerald: Insofar as it applies to our letter of April 21, 1942, I have no objection.

Mr. Hilland: Will you mark this Plaintiff's Exhibit No. 10.

(Thereupon the document referred to was received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 10" and was returned to the hands of counsel offering it.)

(Thereupon Mr. Hilland read Plaintiff's Exhibit No. 10 to the jury.)

By Mr. Hilland:

Q. Now, Mr. Crockett, how much pressure was on this steam line that you installed underground? A. It called for eighty pounds pressure from the boiler house to the pump house.

Q. From what point? A. From the boilers in the boiler plant to the pump room.

Q. Will you refer to Plaintiff's Exhibit No. 7, that is, this first plan, and will you step down here and point out and explain it to us, so the jurors and the Court can see? A. This would be the boiler room here (indicating).

Q. Is that where your furnaces were? A. The steam supply is taken off the boilers at that point.

By Mr. Fitzgerald:

Q. May I interrupt?

Identify the number. A. The number of the
28 building?

Q. Yes. A. This would be 48-A, designated as the power house.

By Mr. Hilland:

Q. You are now referring to Plaintiff's Exhibit No. 7? A. That is the boiler house, building No. 48-A.

Q. How much was the steam pressure beginning at that point? A. I think it was seventy-five pounds.

Q. And from that point to where? A. From this building into the pump room, which is this point here.

Q. What is the number of that building? A. That building is ORM-2.

Q. Will you please trace on that plan the course of that? A. The steam supply comes out of the boiler room and drops down inside the building, goes through the floor and goes into this conduit, goes into a conduit that is brought into the wall of it.

From there it goes underground to the pump room, taking this course and following that course to the expansion loops here.

These are the loops that take care of any expansion that might occur in the line. The expansion and contraction is taken care of by loops in the line, known as expansion bends.

It follows on down to the manholes that are placed at different intervals in order that the traps may be placed in the steam line to take care of the condensation and put it back in the return.

The steam goes on to this point, which is the building I have just called ORM-2, known as the pump room.

29 Q. Will you trace the course of that line from the boiler room? A. I will do the best I can. It follows on down and comes to an expansion bend, goes to Building 55-B, which is a dispensary building, and goes in that building and comes out, and goes to another drop, and it goes on this elevation, goes across on an angle of 45 degrees east to manhole A, where the first one is put in to take care of the condensation and put it back in the return.

It follows down to expansion bend 5, on down to manhole B, on down again to another expansion bend to manhole C, and down to the band stand, and breaks around the band stand, which forms another expansion bend, and it goes to manhole E. From there it goes east to manhole F, from manhole F it goes east to the pump room, turns south and turns into the pump room. It has seventy-five pounds steam pressure going into the pump room.

Q. What is the temperature of the steam going through? A. I think in this catalogue it has 310 degrees, but you have a scheduled effect that goes out.

It is either 310 or 320. I would say 320 degrees on seventy-five pounds of steam.

Q. That is Fahrenheit? A. That is Fahrenheit, that is right.

Q. All right, Mr. Crockett. Will you have your seat now? Do you have any objection to the admission of these letters (handing various documents to Mr. Fitzgerald)? They all relate to the contract and the modifications of it.

Mr. Fitzgerald: No objection to these.

30 Mr. Hilland: Will you mark these letters, please?

(Thereupon the documents referred to were received in evidence and were marked by the reporter "Plaintiff's Exhibit No.11," "Plaintiff's Exhibit No. 12," "Plaintiff's Exhibit No. 13," "Plaintiff's Exhibit No. 14," "Plaintiff's Exhibit No. 15,''' "Plaintiff's Exhibit No. 16," and "Plaintiff's Exhibit No. 17," respectively, and were returned to the hands of counsel offering them.)

Mr. Hilland: I am offering all these letters, your Honor, as tending to show what the contract was between the plaintiff and the defendant as finally agreed upon.

The Court: Very well.

Mr. Hilland: That is also true of Plaintiff's Exhibit No. 10, which I already read. I will read these now.

(Thereupon Mr. Hilland read Plaintiff's Exhibits No. 11 to No. 17 to the jury.)

By Mr. Hilland:

Q. Now, Mr. Crockett, after all these preliminaries to this contract and the changes were made, did you commence your work on the project? A. Yes. We began to excavate as outlined and began building manholes.

Q. Now, at the time you commenced excavating—

Mr. Fitzgerald (interposing): Give the date.

By Mr. Hilland:

Q. Can you fix the date, approximately, when you commenced your excavating? A. I think that letter that you just read gave the date of that. Sitting here, I could not very well do that.

I think it was stated in the letter when we began
31 excavating and expected them to make shipments
accordingly.

Q. Is this the letter, Plaintiff's Exhibit No. 14, to which you refer (handing a paper writing to the witness)?

The third paragraph of that reads as follows: We note from your letter of May 22nd to the United States Engineers that we can expect the first shipment of pipe June 8th? A. That is right.

Q. And we are therefore proceeding with the trench work accordingly? A. Yes, sir.

Q. Did you commence that day or about that time? A. We had began before that time, as a matter of fact.

Q. You had? A. Yes.

Q. At the time you commenced excavating they hadn't delivered any of their pipe? A. That is correct.

Q. Do you remember how much excavating in linear feet you completed before they delivered any pipe? A. We excavated from the boiler room to manhole A.

Q. Will you point that out on Plaintiff's Exhibit No. 7 of the plant up there? A. From this point to this point (indicating) before any pipe arrived on the job.

Q. Now, how much excavating would you normally do at a time before you would start laying pipe in the trench and welding and testing it? A. If their materials had arrived in time—

Mr. Fitzgerald (interposing): I object to that. 32 It is not responsive to the question.

The Court: I sustain the objection.

By Mr. Hilland:

Q. How much would you excavate? A. Ordinarily we would go from one main to the next, a section of pipe.

Q. How much is that distance? A. It varies from two hundred and fifty to three hundred and fifty feet.

Q. You said before that pipe arrived you excavated from the boiler house to manhole, what is that distance? A. I could not state or tell you accurately. I would have to guess at it. It is given on the plan.

Q. Approximately how much? A. Approximately three hundred and fifty feet, more or less.

Q. Do you remember on what date you received the first delivery of pipe? A. I don't recall that but you have a bill in your file showing the date of delivery, and the truck stopped at the gate before it was delivered to get the check.

Mr. Hilland: Do you have any objection to the introduction of that letter (indicating a paper writing)?

Mr. Fitzgerald: No. Is that being used for the purpose of the date?

Mr. Hilland: If your Honor please, it is for the purpose of showing that they were notified they were waiting for the pipe.

Mr. Fitzgerald: The question now is as to the
33 date of the first delivery. Is that going to be used
for that date?

Mr. Hilland: Will your Honor excuse me just one moment?

Mr. Fitzgerald: I can save time. Mr. Crockett stated about some letter as to the time. Is that the letter you have reference to (indicating a paper writing)?

The Witness: Mr. Shinn has the date of delivery in one of these files, showing the date of delivery.

Mr. Fitzgerald: May I ask this of counsel, your Honor? Is one of your claims that the matter was delayed by reason of delivery?

Mr. Hilland: We want to show that was one of the factors involved. That is one of the factors.

Mr. Fitzgerald: May I ask counsel this for the sake of economy of time: Do you contend that you were penalized by the Government because of delay?

Mr. Hilland: No.

Mr. Fitzgerald: Then I must object to that, your Honor, because there is nothing in the pleadings.

The Court: Yes. I do not understand that is set out in the pleadings.

Mr. Hilland: Very well, if your Honor please.

By Mr. Hilland:

Q. Now, can you fix the time approximately that the first shipment of pipe came there? A. You have the records right there in the file. If you allow me to get it for you, I will find that and turn it over to you.

Mr. Fitzgerald: That is immaterial anyway, I think, your Honor.

34 By Mr. Hilland:

Q. Let me put it this way: When the first shipment of pipe was delivered there, did you inspect it? A. I wasn't on the job when the first load came on the job. My superintendent inspected it, and also one of the inspectors who was on the job at the time questioned it.

Mr. Fitzgerald: I object.

The Court: I sustain the objection. Strike out the testimony.

By Mr. Hilland:

Q. Were you able to lay pipe as soon as it arrived there? A. Yes.

Q. What is that? A. Yes.

Q. You were ready to use it? A. Definitely so.

Q. Did the United States Engineer's office inspect it? A. Yes, they inspected the first load of pipe that came on the job.

Q. Did they approve or disapprove of it when it first arrived? A. When it first arrived?

By Mr. Fitzgerald:

Q. Do you know of your own personal knowledge? You say you were not there when the first delivery was made? A. I wasn't there when the first delivery was made.

Mr. Fitzgerald: I object to anything that transpired.

The Court: Yes.

The Witness: My superintendent was on the job.

35 By Mr. Hilland:

Q. How long after the pipe was delivered there did you commence laying it? A. We began laying it the following day.

Q. Now, what part of the installation of that pipe devolved on the plaintiff, the Crockett Engineering Company?

Mr. Fitzgerald: I object on the ground that the contract speaks for itself. He is trying to get him to interpret a contract.

The Court: Yes; as I recall the contract provides for that.

Mr. Hilland: It ought to be explained to the court and jury how that worked in practice.

The Court: The liability is fixed in the contract.

By Mr. Hilland:

Q. Will you tell us how this operation worked in practice? A. The pipe came to the job in twenty foot lengths, with the exception of the loops, which were seven to ten feet, possibly under, in some cases. The pipe was prefabricated at their shop, I suppose, and came to the job in sections, and our work was to unload it off the truck, distribute it to the field, dig trenches, and weld the ends of the pipe together in the field, and assemble it, and put steam on it and test it out under seventy-five—under one hundred pounds steam pressure. On the seventy-five pound line we put on one hundred pound pressure.

Q. When you say it came on the job prefabricated, will you explain to the Court and jury what you mean by that? A. The steam, the eight inch pipe came to the job and it runs twenty foot to the length.

36 Mr. Fitzgerald: I think I can help you on that. I have an exhibit here that will help out.

By Mr. Hilland:

Q. Now, Mr. Crockett, will you explain to the jury what you mean when you say that this pipe was delivered to the job prefabricated?

Mr. Fitzgerald: I don't want to interrupt again but I think we better mark that as an exhibit.

The Witness: Well, that has insulating material and that was applied on the pipe before it came to the job in twenty foot sections.

By Mr. Hilland:

Q. And the lengths of pipe as they came to the job were approximately twenty feet long? A. That is right.

Q. And that entire length was covered or how much was covered? A. On either end it was from eight to twelve inches it is not covered on, to allow for the connections in the trench to be welded in place.

Q. After you laid the pipe in the trench and the end of the pipe together, who did the welding? A. We did. That was part of our contract.

Q. After you welded it, what did you do next? A. After it was welded in place and lined up in the trench, we put steam pressure on it.

Q. What was the purpose of that steam pressure test? A. To make sure there was no leaks on the steam line itself, in the steam supply line.

37 Q. That is, in the steel pipe? A. In the steel pipe; in the installation of the pipe.

Q. It was principally to test those weldings?

Mr. Fitzgerald: I object to the leading question.

Mr. Hilland: I agree it is leading. I am sorry, your Honor.

By Mr. Hilland:

Q. Will you explain to the Court and jury so they will understand the purpose of the steam test? A. This is the insulation, the quality of the insulating materials, and the purpose is—it goes over here.

At either end, a distance of from eight to ten inches, there is no insulating material on it to allow for the pipe to be sealed in the trench. After we had sealed the pipe in the trench you would have the steam be turned on. It is fixed in the manhole so as to hold it and not get out of place, as called for in the specifications, and we put on one hundred pounds of steam pressure on the line that was supposed to carry seventy-five pounds in accordance with the specifications.

After that was tested, we notified the Ehret Company to proceed with the insulating material, to make his field joints.

Q. Take the stand again, please.

When you notified them that the field joints were ready to be made up, will you explain what you mean by that? A. I just explained that the pipe had come on the job with the ends of the pipe, six or eight inches, left off with insulating material so that they could be put in the trench and the joint made with a welded joint.

Q. After you had welded and tested it, what would
38 they have to do? A. They would come in the field
and insulate the joints.

Q. How were they supposed to do that? A. You have a detail there showing each step in which they used the magnesia block.

First of all, according to their own detail, the pipe is cut back on each end of the insulating material down to the waterproofing.

Q. Will you illustrate that on this, please? A. When they come in the field to seal the joints, they have to cut back here (indicating). They take this fiber wrapping off about three inches back. That is the first step and then on the pipe they use a double layer of magnesia block insulation, one layer over the other, and that is put around the sealed pipe, and they, of course used a band to hold that first layer until they got the second one on, and the joints are staggered to prevent any waterproofing from running through the insulating material and coming in contact with the steam line itself.

Q. What do you mean by staggering the insulation blocks? A. The blocks are put on in two layers, and it comes on the job about four inches wide, and they put one complete layer around and when they put the next section on they stagger the joints so the waterproofing when it is poured hot won't run between the joints and come in contact with the steel pipe itself.

Q. Is that staggered somewhat as you would do on the shingling on the roof?

Mr. Fitzgerald: I object to the leading question.

39 The Court: It is supposed to be explanatory. I will overrule it.

The Witness: That is not the true example. This is only one thickness of insulation and they were to furnish two.

By Mr. Hilland:

Q. This is only one? A. Yes.

Q. One thickness? A. That is not a true sample of the insulating material. We used double thickness.

Q. Now, if you are— A. (interposing) After you put on the magnesia block, you have to mix up asbestos cement to a plaster, like a plaster that you put on the wall, and then these joints are pointed up so that this hot tar can't come in contact with the steam pipe, and they have a fiber sleeve that is underneath, coming over that top and overlapping on each side of the conduit, and that is split in two and put around and wired in place, and at the ends it is built up with the magnesia block and is built up under it an inch thick to get an inch of waterproofing or whatever the material is to form the joint and seal up the pipe. That sleeve holds that in place, and it is poured in the sleeve with the holes, and when it is poured it is poured awfully hot and you have to make sure that no air gets in. If you don't make sure the joint is filled, you are likely to have an open joint and air is coming out as it cools.

If there is any moisture in the casing, it has to come out when the joint is poured.

Q. That outer casing that is put there, must that

40 be completely filled or partially filled? A. It has to be completely filled. I am speaking about the moisture from the joint. The waterproofing to hold it in place, it has to be completely filled to the top.

Q. Now, when they had delivered these lengths of pipe with this factory covering had they sealed these to keep the moisture from getting in here? A. No; no more than on this.

Q. It was entirely exposed, like this, when it was laid in the trench and when they delivered it? A. Yes; certainly.

Q. It was in the same condition when it was laid in the trench before the welding was done? A. That is right.

Q. Now, if moisture gets into the magnesium around here, what happens to it? A. Any moisture that is sealed up in there would come in contact with the steam at seventy-five pounds steam pressure and with the 320 degrees Fahrenheit in there it would create steam in the casing and blow it out. It would destroy the casing. It would have to come out.

Q. Now, did the progress of their covering the sealed joints, as you have described they did, did their progress and work there keep up with your progress of laying and welding and testing the pipe? A. No, they didn't.

Q. As you got ready for them to make these sealed joints, did you notify them you were ready? A. Yes; our records proved that.

41 Q. After you notified them they were ready, did they supply sufficient help to keep up with you? A. No.

Q. About how far behind your operations did they run? A. Well, I would say they were a thousand foot behind us.

Q. About how many field joints were there for them to make in the length of a thousand feet? A. The pipe is in twenty foot lengths, and in a thousand feet you would have—

Q. (interposing) At least fifty? A. Yes, fifty joints, but I might tell you that you have expansion bends in there, and they have four joints on each one and that would add to the quantity.

Q. And you would have fifty including the expansion bends? A. Yes.

Q. You would have at least four in these expansion joints? A. Expansion bends are not made the same as straight joints.

They are entirely different. You haven't asked me to explain them.

Q. At the time the workers made those field joints, those are made by the Ehret Magnesia Manufacturing Company? A. By pipe coverers or asbestos workers.

Q. Asbestos workers?

When you say pipe covers or asbestos workers, do you mean the same thing? A. I think that is the trade union, the asbestor workers.

Q. They are also referred to as pipe coverers? A.
42 That is right.

Mr. Hilland: Do you have any objection to those letters (handing various paper writings to Mr. Fitzgerald)?

May we approach the bench, if your Honor please?

The Court: Yes.

(Counsel for the respective parties approached the bench and, out of the hearing of the jury, the following occurred:)

Mr. Hilland: If your Honor please, Mr. Crockett, for the plaintiff, wrote a series of letters to the defendant notifying them of the progress they had made in laying the pipe and welding and testing it and urging them to put the asbestos workers on to get to work on the field joints and on the progress of their work.

I want to offer these letters now for the sole purpose of showing that the plaintiff did notify them that the field joints were ready for their workers.

Now, he takes up the position that I will have to offer their reply. What they actually did was to undertake to build up a case by their reply. I don't think the replies are admissible.

We are offering them merely for the purpose of showing we notified them and they knew of the progress of our work.

Mr. Fitzgerald: There is no question of building up a case. It is just a case of answering. These are self-serving declarations by Mr. Crockett.

Mr. Hilland: I didn't offer them to prove that is a fact but to show that we gave them notice.

Mr. Fitzgerald: We answered them and stated
43 the reasons for the delay, if there was any delay, but
if you will allow the answers to come in and exhibit the answers, I will not have objection to these exhibits. I don't think the jury is getting a full picture without them.

The Court: I will admit these. I will not admit the answers at the present time.

Mr. Fitzgerald: You will allow me an opportunity to cross-examine him about the answers?

The Court: I will rule on that when I get to it. I think we might as well recess now.

Mr. Hilland: I am just offering them for the purpose of notice, not to prove the facts.

The Court: That is what I understood.

I will admit them for that purpose but I am not admitting the answers at the present time.

* * * * * * * * * *

45 Mr. Hilland: Your Honor will recall that yester-
day I asked this witness about the date of the first delivery of material, and other dates of delivery, to which there was an objection. He said he did not remember the exact date, but the papers he had turned over to me would show that fact. Then there was some discussion and I thought I heard your Honor say something about there being nothing in the pleadings about it and the testimony not being admissible. * * *

The Court: The question was the question of delay, as I recall it.

Mr. Hilland: What we want to show is this, your Honor:

The deliveries were delayed. You will remember they agreed to make the first delivery on June 8th and the last by July 31st.

We expect to show that they did not make the first delivery until June 25th and the last on October 2nd and that rains intervened and this insulation was damaged as a result of that delay * * *

Mr. Fitzgerald: The point is this, Mr. Hilland: You are not suing for damages because of delay. Your contract with the Government specifies that if the work is not completed within such and such a period of time then the liquidated damages is sixty dollars a day for every day delay. You are not suing because of the penalty. No penalty was involved. You are suing solely on the basis of the property itself being damaged.

I submit that it makes no difference, then, if it was
46 delayed and exposed in the trenches; that such exposure was due to you people in not protecting it.
That was my objection.

You are not suing on the penalty but are suing for damages to the stuff itself.

Mr. Hilland: Not that we were assessed the sixty dollars a day penalty under the contract, but because of their delay in the delivery, because of their delay in delivering sufficient pipe coverings, the damage resulted from that intervening delay, caused by their delay in deliveries and their failure to cover the field joints as the work progressed.

During that delay we show the rain intervened and that is when it got wet.

Mr. Fitzgerald: The point is that we sealed the Durant system in the field after it has been welded and tested. If that remains.in the trenches unprotected by you folks the delay and the rains have nothing to do with it * * *

The Court: As I understand it, you are not claiming any liquidated damages under any penalty?

Mr. Hilland: That is true, but we are claiming—

The Court (interposing): If you do not claim that, I will admit the evidence.

Mr. Hilland: That is right.

The Court: But if you want it as a basis for anything else I will exclude it.

Mr. Hilland: We want it only for that.

The Court: I will admit it for that.

Mr. Fitzgerald: With the understanding that it will be so explained to the jury?

The Court: That there will be no claim for any
47 penalty for liquidated damages.

Mr. Fitzgerald: And if you are ruling that way, may I have an exception?

The Court: Oh, yes.

* * * * * * * * * *

Q. Mr. Crockett, I hand you a group of papers and I will ask you whether or not you can identify these (handing various data to the witness).

Just say whether you can identify them. A. (after examining the documents last above referred to) Yes.

Q. What are they? A. Those are invoices for materials delivered to the job.

Q. And from whom did you receive those invoices? A. The Ehret Magnesia Manufacturing Company.

Q. And did you—or what did you do with those
48 various invoices? A. Well, the dates are given on
each invoice.

The first one happens to be June 25th.

Q. Without reading it, with respect to the time of delivery of the various loads of pipe, when did you receive these invoices?

In other words, did you receive the invoice before or at the time or after the time of delivery? A. Usually on the date of delivery. They were mailed the evening prior to shipment.

Mr. Hilland: Thank you.

By Mr. Hilland:

Q. Does this group, all the deliveries of pipe made by the defendant to you on the job? A. I have not checked them. I do not know whether they are all there or not.

I would have to go through them and check with the books.

Q. All right; if you will, please. A. (after examining certain books and records) As far as I can see here, I think with one exception—it may be some extra materials that they were paid for as an extra which came to the job at the very last shipment; I do not see that invoice in here, but that was not in the original contract.

Q. Do you remember when that last material came to you to which you refer? A. About November 11, 1942.

Q. And all the others are in there? A. As far as I can see they are.

Mr. Hilland: I offer these in evidence.

You have seen them.

49 (The data under consideration was examined by counsel for the defendant.)

Mr. Fitzgerald: I have no objection.

(A group of documents thereafter described by counsel for the plaintiff as "A group of invoices on the billhead of the defendant Ehret Magnesia Manufacturing Company" was thereupon, in its entirety, received in evidence and was by the reporter marked "Plaintiff's Exhibit No. 18" and was returned to the hands of counsel introducing it.)

Mr. Hilland: Ladies and gentlemen of the jury, Plaintiff's Exhibit No. 18 is a group of invoices * * *

By Mr. Hilland:

Q. Mr. Crockett, was this material received on the job on the date of the shipment, or some other date? A. It was usually received on the following morning of the date of shipment.

Q. By what method did they ship this material? A. It was brought down by truck from Pennsylvania; it was usually shipped in the afternoon and reached the job the following morning.

Q. And what I particularly want to point out, and see if I am correct if you will, is that the first shipment was June 25, 1942, and the last shipment October 1, 1942 according to these invoices? A. Yes.

Mr. Hilland: Now, Mr. Fitzgerald, here is a group of letters we talked about yesterday at adjournment time (handing a group of papers to counsel for the defendant).

Mr. Fitzgerald (after examining the documents
50 last referred to): May I get clear from counsel, for
the record, just what is the purpose in his mind in
introducing these particular letters in evidence?

They are all self-serving declarations, your Honor.

Mr. Hilland: Merely for the purpose of showing that the defendant was notified when the pipe had been laid, welded and tested and was ready for the field joints.

The Court: Very well. I will admit it for that purpose.

Mr. Hilland: Your Honor, if you please, there are nine letters here and I prefer to—well, which would you prefer, to have them marked as one exhibit or separately?

The Court: Just as you prefer.

Mr. Hilland: If we can agree, this next group will be Plaintiff's Exhibit 19.

* * * * * * * * * *

53 Q. Now, Mr. Crockett, those letters frequently refer to loops.

Will you explain what is meant in these letters when you refer to a loop? A. Expansion loops are put in the line to provide for expansion and contraction.

This pipe is anchored in each manhole.

That is why the manholes are provided, to keep them from getting out of course.

In other words, the manholes are provided to guide and hold them in place, and these loops are placed for that purpose in intervals of about three hundred feet which provides for probably one inch or more of expansion on the steam line.

The loops are sized according to the distance of run between the manholes, larger or smaller, to take care of the length.

Mr. Hilland: Now, we have some enlargements here, Mr. Fitzgerald, of some of your construction of expansion loops.

Do you have any objection to these?

We just had them enlarged so as to be easily seen.

Mr. Fitzgerald: Let me look at them for just a second.

Mr. Hilland: Sure.

(The photostatic enlargements in question were examined by Mr. Fitzgerald.)

Mr. Fitzgerald: I have no objection.

Mr. Hilland: Will you mark these as exhibits, separately?

(Three photostats of enlargements descriptive of
54 expansion loops, as above indicated, were thereupon
received in evidence and were marked by the reporter "Plaintiff's Exhibit No. 20" "Plaintiff's Exhibit No. 21" and "Plaintiff's Exhibit No. 22" and were returned to the hands of counsel offering them.)

Mr. Hilland: I offer Plaintiff's Exhibits No. 20, 21, and 22 in evidence, to which I understand there is no objection?

Mr. Fitzgerald: No.

The Court: They have been already marked. They are in evidence.

By Mr. Hilland:

Q. Will you explain to the Court and the jury what Plaintiff's Exhibits Nos. 20, 21, and 22 are?

First, of all: Where did these drawings come from? A. These are exact photostatic copies of working drawings of Ehret Magnesia Manufacturing Company. These photostatic drawings are exact copies showing the different parts that were shipped to the job and the proper assembly for those parts in the line, and they were photostated and blown up twice the original size.

Q. All right. Will you explain to the jury first to what do all three of these exhibits relate?

Do they relate to—A. (interposing) All three prints relate to the expansion loops and their relation to joint building and placing of pipe.

Q. Now, will you explain what Plaintiff's Exhibit No. 20 shows and point to it as you talk about it, please? A. This (indicating the exhibit) would be 20.

That (indicating) is the schedule of material shipped to the job, giving the part number.

55 You notice the part numbers are given on each of these sections of pipe which go to the job, just as you see them there in that shape and form.

These (indicating) are expansion chambers, placed in this position here so there would be room for the pipe to expand in that chamber.

This part here (indicating) would be part No. 4, assembling in the line here.

This (indicating) would be part No. 4 here, placed in the trench.

Part No. 2 would be this (indicating) and part No. 3 would be this (indicating).

These parts were received at the job, and our job was to assemble them in the trench.

By Mr. Fitzgerald:

Q. Will you repeat that? I could not get it. A. They were shipped to us to the jobs in those parts, as I explained, and were assembled; we assembled them and welded them in place in the trench ready for your men to insulate the joint.

By Mr. Hilland:

Q. Will you show the point at which you do the welding? A. After we had welded these loops in the line, then when the Ehret Company men came to cover the joint, they shipped the materials in and the next step was that these metal loops were shipped to the job and each part numbered, and, of course, our part of the job was to weld those oversize casings to the pipe and that was welded, as you
can see to this under here (indicating), the oversize
56 chamber in each case forming the seal to keep the
waterproof and covering from dropping down in the
expansion chamber.

These welds that came inside and outside and when they placed the block you get this here (indicating).

Q. Will you explain that which you say you "get here"? A. After this was welded in place, Ehret men came in and proceeded to install the magnesium block insulation, and this (indicating) is that step; they put in that magnesium block insulation, put it on in double thickness over the pressed casings.

They went from there (indicating) to this here, and put on an outside casing which formed a mold for the waterproof.

That was tack-welded by us according to our agreement in place, and Ehret proceeded to build up his joint for the waterproofing compound.

Q. Will you explain how they poured that waterproofing compound? A. Well, that comes to the job in drums. I would say this was shipped in five hundred pound drums, and that is broken up in small bits and put into a furnace and melted to proper consistency, which makes it run very freely when heated to the right temperature, and poured.

Of course, that is part of Ehret Company's work.

I do not know what temperatures they used.

Q. Whenever there was an expansion loop, how many joints were there to make up in these expansion loops A. There is always—not always, but in this type of joint there are four joints, one, two, three, four (indicating) at every right angle turn.

57 Q. Now, did you do any part of the insulating of these joints?

Were you required to do any part of the insulating of these joints under the contract? A. No, not under our contract we were not.

Q. Were you required to do any part of the waterproofing of these joints? A. No. Our work stopped, ceased, when we placed this band as you see it in that position, and welded these joints (indicating).

Q. Your work consisted in—do I understand, correctly, that your work consisted in laying the pipe in the trench?

Mr. Fitzgerald: I object to the leading question.

If counsel is not satisfied with the explanation, let the witness state it more thoroughly.

By Mr. Hilland:

Q. What was the first thing you did with the pipe when it came to the job? A. The first thing was to get it out of the truck and place it in the trench where it was going.

Q. From that—A. (interposing) After they placed it in the trench, welded it in place, and prepared it for covering.

Q. And when you had welded it together, was that the end of your work? A. No. After the joints were welded—no, we had to put the test on to suit the United States Engineer requirements.

The United States Engineer required us to leave the test on for a definite period of time to definitely determine
58 that there were no leaks in the steam line itself.

Q. You mean at the point you had welded it? A. That is correct.

All joints have to be tested, as well as the pipe itself.

Q. And that test was always made before covering was started? A. That is so; left on until it was authorized to be taken off by the United States Engineer's representative.

Q. All right, now, if you will resume.

Now, incidentally, what similarity was there between the joints at these expansion loops you have told us about and the joints where the pipe line was straight in the trench? A. Well, at the expansion loops, these chambers came to the job with the outside metal casings in them.

The wrapping on the outside is sixteen guage sheet metal to hold the waterproof in place and, on those particular joints, where the outside casing came, they were spot welded to the outside casing.

Your straight runs of pipe came to the job very much like the sample showed yesterday, with an outside fiber casing made of paper.

In these cases, the joints, of course, were assembled somewhat differently.

They were, instead of being welded, the fiber sleeve was wired to the casing to which it joined and the joint plastered by that asbestos.

Q. Who built up those sealed joints? A. Well, the sealed joints, of course, were built up by the Ehret Company's men.

59 Q. On those field joints, did you do anything other than weld the ends of the pipe together? A. Not on the straight runs of pipe.

Mr. Fitzgerald: I did not get that.

Will you read that, Mr. Middlemiss?

The Reporter (reading):

"Q. On those field joints, did you do anything other than weld the ends of the pipe together? A. Not on the straight runs of pipe."

By Mr. Hilland:

Q. All right, Mr. Crockett.

Will you resume the witness stand, please?

(The witness who had been demonstrating at the blackboard did resume the witness stand.)

By Mr. Hilland:

Q. Who was the Chief Inspector on this job for the office of the United States Engineer? A. Mr. Ecton.

Mr. Fitzgerald: I did not quite get that.

Will you repeat it?

The Reporter (reading):

"Q. Who was the Chief Inspector on this job for the office of the United States Engineer? A. Mr. Ecton."

The Witness: He was in Major Hall's office.

By Mr. Fitzgerald:

Q. Was he the Chief Inspector? A. Yes, yes.

By Mr. Hilland:

60 Q. Now, on or about August 27, 1942, did you have a conversation with Mr. Ecton on the job at the Army War College? A. What was the date?

Q. On or about August 27, 1942? A. Yes. We had several meetings and discussions at about that time.

Q. Well, now—strike that question now. I want to go back.

Mr. Crockett, during the progress of this work, did you have any rains? A. The rains began about August 1st, and we had almost continuously rain pours over a period of about three weeks; I think it rained pretty much every day during that period of time, I would say from the 1st of August to maybe the 15th.

Q. At the time those rains came, had the defendant completed the field joints up to the progress of your work? A. No, they had not.

Q. Now, will you describe to the Court and jury the condition of the trenches after those rains came? A. Well, of course, we had rains down there that were very heavy and water rose on the parade field, from the manhole A, I would say, almost to G, which is a low point in the field, and we had considerable water in the trenches and ditches.

Q. Well, how much water can you say that you had in the trenches and the ditches? A. In one section there, it came completely over the top of the trench and we had to have pumps pumping night and day, daily, trying to keep it down.

Q. Well, what is the elevation of that ground there,
61 in relation to the river?
It is farther up than the river, is it not? A. I think it is actually on the parade field about two feet above tide level.

Q. Now, after those rains came, did there come a time when a conversation or a conference was called in relation to what to do about it? A. Yes, yes.

Q. When was that approximately, if you remember? A. That was about the time that these rainstorms had come and it looked as if we were going to have them cease for a while, it looked as if they were ready to cease for a while, and Mr. Ecton and all the rest of them, in connection with this job, were very much—

Q. (interposing) Well, just come to this.

A conference was called? A. That is correct.

Q. Can you fix the time, approximately? A. That is correct.

Q. Where was the conference held? A. In Mr. Vandersluis' office, who was then Post Engineer. It was called in his office.

Q. Who was he? A. The Post Inspector.

By Mr. Fitzgerald:

Q. Did you say "Post Inspector"? A. Yes.

Mr. Hilland: You will have to keep your voice up.

62 The Witness: Mr. Vandersluis was Post Inspector, or boss inspector, at the United States Army War College—I guess that would be his title.

By Mr. Hilland:

Q. Was he connected with the office of United States Engineers? A. Yes, he came from the office of United States Engineers.

Q. Now, who else was present at that conference? A. Mr. Stecher, my superintendent, general superintendent, was there.

Major Hall from the United States Engineers office was there.

Mr. Vandersluis was there.

There was an inspector there, Mr. LeVan, I believe his name was, who was under Mr. Vandersluis at that time.

Mr. Droba of the Ehret Company was there.

Q. This gentleman sitting here (indicating)? A. That is right.

Mr. Droba was there.

Q. Was there anyone else that you can recall? A. Mr. Frank Daniels, my steam fitter foreman who was laying the pipe, was there.

Q. Who else? A. Well, that is about all.

Q. Well, now, will you tell what was said and done at that conference, and what was decided? A. Well, the purpose of the conference was, of course, to try to speed up the job. We were very much behind—

Mr. Fitzgerald (interposing): I object to the conclusions of the witness. I think he is qualified to 63 testify as to what was said and done but as to conclusions of this, that, and the other thing, I think they are not admissible.

Mr. Hilland: I agree with him.

What I am trying to get the witness to simply say is what he said and what the others said, and the conclusions.

The Court: Let him confine his answer to that.

Mr. Hilland: Yes. I quite agree with you.

By Mr. Hilland:

Q. According to your best recollection, simply state what was said. A. By whom?

Q. By those present. A. Mr. Ector asked for progress on the job and why this job could not be cleaned up, and some progress shown.

Mr. Droba answered to that was, or his answer to that was that the pipe lines were wet and could not be covered under the present conditions.

Major Hall then asked if he had any suggestions to offer.

Q. Asked who if he had any suggestions to offer? A. Major Hall asked Mr. Droba if he had any suggestions to offer that might speed up the progress of this work.

It was decided by Mr. Droba that heat could be put on the lines to dry the lines out in order to speed up the drying progress, so the joints could be made and poured.

Q. Now, was that done? A. Major Hall asked me to get in touch with the United States Engineers, to get in touch with the boiler room, Captain Colbert, who had charge of the power house to make arrangements 64 to put on temporary heat to dry out.

The boilers at that time were turned down and they could not furnish heat for that purpose because they could not run the boilers.

They were waiting for grates for the boilers.

So I was instructed by Major Hall to set up a portable boiler and hook it up temporarily to these lines to dry these lines out, as suggested by Mr. Droba, in order that he might cover his joints.

He went out and bought and set up and connected a portable high pressure steam boiler that carried ten pounds steam pressure.

It was set and the safety valve was set to carry not more than ten pounds steam pressure.

We hooked it into these lines and kept a foreman there night and day drying the lines until it was determined by Mr. Droba that the lines were dry enough to cover.

Q. Did the Ehret Company's men then proceed with the covering of these field joints? A. They then proceeded, but they did not have on hand sufficient help to keep up then with the pipe lines.

Mr. Fitzgerald: I object to that, then.

Mr. Hilland: I do not think the answer is responsive.

By Mr. Hilland:

Q. They did proceed with the work? A. They did proceed with the work.

Q. All right, now:

On or about August 27, 1942, did you have a conversation with Mr. Ecton? A. Yes. 65

Q. At the Army War College? A. Yes.

Q. Will you state what that conversation was?

Mr. Fitzgerald: Just one second, if you please.

I object to the question unless they can show that some representative of the defendant was present in the conversation.

Mr. Hilland: I think you are right about that. I will put it this way—I believe he testified that he did have a conversation, did he not?

By Mr. Hilland:

Q. You did testify that you had a conversation? A. I did.

Q. Now, as a result of that conversation with Mr. Ecton, what if anything did you do, first? A. First of all I wired the Ehret Company to put more men on the job.

Q. When you say you "wired" the Ehret Company to put more men on the job, what do you mean by that? A. I sent them a telegram that afternoon, thirty minutes of—

Q. (interposing) I will hand you this paper and ask whether you can identify it (handing a paper writing to the witness). A. (upon examining the document last above referred to) Yes. This telegram was sent by myself to the Ehret Company.

Q. And on the date indicated on it? A. On the date indicated on it, yes.

Mr. Hilland: I offer this in evidence.

66 Mr. Fitzgerald (after examining the document last above referred to): I object. It is a self-serving declaration.

The Court: Let me see it.

(The request of the Court was complied with.)

The Court (after examining the document last above referred to): I overrule the objection.

(Thereupon the telegram in question was received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 23" and was returned to the hands of counsel offering it.)

Mr. Hilland: Ladies and gentlemen of the jury, Plaintiff's Exhibit No. 23 is a Western Union form * * *.

By Mr. Hilland:

Q. After you sent that wire, did you place any asbestos workers and coverers on the job? A. Yes, we did, three days later.

Q. And on what date did you place them? A. Friday.

Q. What? A. We placed the men on the job on Friday morning.

Q. Well, can you fix the date of the month, and what month? A. I would have to go to my records to fix that date; it is not clear to me what date it was.

Q. You do not remember of your own recollection? A. The telegram was sent and these men were placed on the job three days later from the date of the telegram.

Q. When you placed these men on the job, after the date of the telegram, did you notify the Ehret Company? A. Did we notify them?

67 Q. Yes. A. Yes.

Q. And how did you notify them? A. By letter.

Mr. Hilland: Now, I offer this in evidence, Mr. Fitzgerald.

(The document last above referred to was examined by Mr. Fitzgerald.)

Mr. Hilland: If your Honor please, I might say I offer that letter merely for the purpose of showing notice, as in the other case.

Mr. Fitzgerald: I have no objection to the letter provided that is the sole purpose.

The answer to this letter given to him by the defendant, if you have that—that letter in answer to this?

Mr. Hilland: Yes, I have it, but I do not think it is admissible, your Honor.

Mr. Fitzgerald: Well, I do.

The Court: Let me see it.

(The request from the Court was complied with.)

The Court: I will admit the first clause.

Mr. Hilland: Very well, I merely want to show that.

Mr. Fitzgerald: Let me see it.

(The document was examined by Mr. Fitzgerald.)

The Court: About a line and a half or two lines.

Mr. Fitzgerald: May I make this condition to that: That counsel also exhibit the answer to that letter?

The Court: Very well; you may do that on your case. I am not saying now that that is admissible.

68 (The portion of the letter in question as indicated by the Court, was thereupon received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 24" and the letter was returned to the hands of counsel offering it.)

Mr. Hilland: I will read the first clause of this letter * * *.

By Mr. Hilland:

Q. Now, Mr. Crockett, at the time you placed these pipe covers, did the defendant have any pipe coverers on the job? A. Yes; he had pipe coverers on the job.

Q. And were they working at that time? A. Yes, they were working at that time.

Q. Now, after you placed your pipe coverers on the job, what if anything did their pipe coverers do? A. They left the job and we put men to work.

Q. Were there any pipe coverers, Union or non-Union men—

Mr. Fitzgerald (interposing): You mean our own pipe coverers or his?

Mr. Hilland: Yours.

The Witness: I suppose there were Union pipe coverers.

By Mr. Hilland:

Q. And those you placed on were what? A. Non-Union coverers.

Q. Now, did there come a time when you withdrew those pipe coverers from the job? A. Will you repeat that question?

The Reporter (reading):

"Q. Now, did there come a time when you withdrew those pipe coverers from the job?"

The Witness: Yes.

69 By Mr. Hilland:

Q. On what date did you withdraw them? A. Was it not the 2nd of August?

Q. What? A. Wasn't it the 2nd of August?

I think it was.

I am not clear. I would have to go to my records and time sheets.

Q. Well, this letter we have just read of September 1st shows that you placed them on the job on September 1st.

Do you remember how many days your coverers were on the job—perhaps you can get at it this way. A. Three days —three and a half to be exact.

Q. Then you withdrew them on September 4th? A. That would be correct.

Q. Do you remember at what time of day? A. At noon.

Q. What? A. Noon.

Q. During the progress of this work, did you have any men making any field joints, that is, insulation and waterproofing, other than on those three and a half days? A. No.

Q. Now, can you fix approximately the time when this job was finally completed? A. The job was completed, so far as our contract was concerned, around the 1st of November.

Heat was placed on the temporary building.

Q. Now, after that time, did any difficulties or defects show up in the line? A. Yes. 70

Q. Can you fix the time approximately when that occurred? A. Fifteen days after heat had been turned on.

Q. Will you tell the Court and the jury how those defects first showed themselves? A. The trouble first appeared where the ground, of course, was the lowest, and moisture had accumulated on the surface, and it was noticed by vapor and steam rising out of the ground, and that occurred between the points of the band stand and manhole F—

Mr. Fitzgerald (interposing): May I interrupt?

Mr. Hilland: Yes.

Mr. Fitzgerald: Will the witness go back to the exhibit?

Mr. Hilland: All right.

(The witness left the witness stand and approached the blackboard upon which Plaintiff's Exhibits Nos. 7 and 8 had been mounted.)

By Mr. Hilland:

Q. Now, Mr. Crockett, will you step up to Plaintiff's Exhibit No. 7 and point—take the pointer again, please—and put out on Plaintiff's Exhibit No. 7 where those defects first appeared. A. (indicating on the exhibit in question) This is the band stand—starting with the band stand, south of the band stand, I would say, at a distance of one hundred feet, the first point of trouble was about that location, and it was noticed by hot water bubbling up out of the ground.
not coming from steam in the pipe, but the moisture
71 that came in contact with the heated steam.

Also another place, between manhole E and F here (indicating).

Those were the first two points that were noticed when that trouble first began.

Q. Now, if you will resume the witness stand please, Mr. Crockett.

(The witness did as requested.)

Mr. Hilland: Do you object to this (handing a document to Mr. Fitzgerald)?

Mr. Fitzgerald (after examining the document last above referred to): I have no objection to this.

Mr. Hilland: I offer this merely, again, for the purpose of showing that the plaintiff notified the defendant of these defects.

This is a letter dated December 5, 1942, from the plaintiff to the defendant.

The Court: If there is no objection the letter will be admitted for the purpose stated.

(Thereupon the letter in question was received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 25" and was returned to the hands of counsel offering it.)

Mr. Hilland: Ladies and gentlemen of the jury, this is a letter dated December 5, 1942, from the plaintiff to the defendant * * *.

By Mr. Hilland:

Q. Now, following the appearance of these defects, did you have conferences with officials at the office of the
72 United States Engineers? A. Yes.

Q. As the result of those conferences, did you make any tests to find out what defects there were and where they were? A. Yes.

Q. All right. What tests did you make? A. We were instructed to uncover the line at intervals of every two hundred feet; that is, to dig down to the line, and uncover it for a distance of every three feet in the trench.

Q. Beginning at what point? A. Beginning at manhole A.

Mr. Fitzgerald: If he will point at those it will be helpful.

The Witness: Beginning—

Mr. Fitzgerald (interposing): Point them out.

Mr. Hilland: Yes. If you will step down to the blackboard again, Mr. Crockett, and point them out.

(The witness again left the witness stand and referred to Plaintiff's Exhibits Nos. 7 and 8 mounted on the blackboard.)

The Witness: We began to uncover the lines at intervals of two hundred feet at this point (indicating) and followed the entire line to Temporary Building 6, including the buildings that are not shown on this exhibit.

Mr. Hilland: I will put this one back on the board (doing as indicated).

⋮

The Witness: That, of course, included the section of pipings from the Officers Mess, this building which is this one here (indicating), which supplies steam to this building No. 3 (indicating).

73 By Mr. Hilland:

Q. Was that—did you examine those test holes, Mr. Crockett? A. Yes, I did.

Q. Will you describe the condition that you found? A. We found in all cases that waterproofing had receded from the top of the pipe to some point whereas this other here (indicating) had very little waterproofing at any point left in the casing. It had disintegrated and left.

Q. Mr. Crockett, will you tell the Court and jury what that is in the box (indicating an object)? A. That is a section of casing cut off of a length of pipe that was shipped to us from Ehret Magnesia Company plant, taken out in the field, put in the weather and kept there.

Mr. Fitzgerald: Will you read that answer?

The Reporter (reading):

"A. That is a section of casing cut off of a length of pipe that was shipped to us from Ehret Magnesia Company plant, taken out in the field, put in the weather and kept there."

The Witness: And taken to our shop and stored under the weather.

By Mr. Fitzgerald:

Q. Taken to your shop and stored under the weather did you say? A. I mean out of the weather.

Q. Taken to your shop and stored out of the weather? A. Yes.

By Mr. Hilland:

74 Q. Has that piece of covering ever been in the ground? A. No.

Q. Will you explain if that was cut off another piece? A. It so happened that this section of pipe was that much too long; that had to be cut out of it, so when we cut it off we noticed the condition of it and kept it.

Q. That was cut off before the pipe was laid in the trench? A. That is right.

Q. So that piece never had been in the trench and never has been used? A. No; never has been used.

Q. Now, will you explain this cover?

What part of the pipe did this go over? A. This would be the end of the pipe (indicating); that (indicating) is the end of the pipe.

This is the way it was cut out.

Q. Now, when that covering comes, as I recall it, it comes in eighteen or twenty foot lengths? A. It varies. It varies and comes in random pipe lengths, it runs from eighteen to twenty-one and twenty-two feet.

Q. At the end of the covering on these lengths of pipe, does this end of the covering come filled with asphalt or waterproofing? A. When it comes to the job, it comes very much like that, like that sample there, but, as shown yesterday, it is supposed to be filled out with the pipe.

Q. I am asking now about the waterproofing.

How far up to this end (indicating) does that
75 waterproofing extend? A. The waterproofing extends right flush with the casing when it arrives on the job.

Mr. Hilland: All right. Now, let us take this end of the waterproofing (indicating).

By Mr. Hilland:

Q. Will you explain to the members of the jury what if anything is wrong with the waterproofing on that end of the pipe?

Mr. Fitzgerald: Now, just a minute:

I object to that unless counsel can qualify this gentleman to prove that there is something wrong with it and, besides, he is speaking about the interior of the piece cut off and not the exterior.

I understand that this is the exterior of the pipe and you cut this off in here (indicating) and that is the interior. That (indicating) is the inside of the pipe.

Now, he is asking what is wrong.

I submit that there is no qualification of this witness to make him able to testify to that.

Mr. Hilland: I said "what if anything."

The Court: Ask him first if anything is wrong.

Mr. Hilland: All right, I will do that.

By Mr. Hilland:

Q. Is there anything wrong with that waterproofing on that piece of covering? A. The waterproofing is very irregular and a quarter of an inch thick on one side and two and a half inches thick on the other.

76 Q. How is it supposed to be? A. It is supposed to be uniform, the same thickness all the way around the pipe, I should think.

Mr. Fitzgerald: That is just his opinion.

By Mr. Fitzgerald:

Q. That is just your opinion, isn't it?

Mr. Hilland: Well, is there any dispute about that, Mr. Fitzgerald?

Mr. Fitzgerald: I am asking if that is his opinion or not. He said "I should think."

By Mr. Hilland:

Q. Now, then, with just a quarter of an inch of asphalt waterproofing, as you say there is here, will that protect the magnesium from water damage?

Will it waterproof it? A. No.

Mr. Fitzgerald: I object to the question and to the response and I move that the response be stricken out on the ground he is not qualified to answer.

The Court: I overrule the objection.

By Mr. Hilland:

Q. Now, Mr. Crockett, is that piece of covering typical of other covering, or typical of covering that was used on the job? A. That is a fair sample.

Mr. Fitzgerald: I object to the question and move that the answer be stricken.

The Court: I sustain the objection.

The answer will be stricken.

Mr. Hilland: All right. I will ask him this:

77 By Mr. Hilland:

Q. Did you see other pipe covering on the job where the waterproofing varied as in the case of this piece? A. It varied in all cases.

Q. What? A. It varied in all cases.

Q. Did you see other pieces on the job where the waterproofing was as thin as it is in this piece here (indicating)? A. Yes.

Q. All right, now.

Have you any other—I would like this piece marked as an exhibit.

The Court: Yes.

(The object in question about which the witness had just testified was thereupon received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 26.")

By Mr. Hilland:

Q. Now, Mr. Crockett, I believe you have another piece of material in that box (indicating).

Will you bring that out?

First of all, the piece of waterproofing that you have— A. (interposing) I am afraid the waterproofing simply has fallen apart.

This is just a piece that was picked up. That is next to the covering.

This piece rested next to the covering, and there was a hole all the way through it.

That was taken out of the line.

Q. That was taken out of the line when? A. When
78 we were replacing the job and had to tear the whole thing out.

Q. You said there was a hole in that piece of waterproofing? A. There it is (indicating).

Q. Is that hole supposed to be in it? A. No.

Mr. Fitzgerald: Now, I object to that.

The witness said he picked that piece up from the ground where it was torn out.

The Witness: Taken out of the line.

Mr. Fitzgerald: Just a minute.

The Court: Just a minute.

Mr. Fitzgerald: And here he is asked—he takes a piece off the ground and brings it in court and says that there is an open space there and he is asking this witness whether or not that should be there.

This witness, manifestly, is not qualified to say that.

The Court: I do not see why he is not qualified to say that. That is his business.

Mr. Fitzgerald: Well, here is a piece of material taken from the job, and he brings it into court and he undertakes to take a piece there and says now that this is absent, that is, some of the waterproofing is absent in this hole.

I submit the very nature of things he cannot testify to that.

The Court: Of course, I think it goes to the weight of his testimony that he simply picks it up, but as to this particular piece, he can testify whether that is what is
79 required by the contract or not.

Mr. Fitzgerald: Your Honor will allow me an exception?

The Court: Yes.

By Mr. Hilland:

Q. Mr. Crockett, the waterproofing that is put on, is that supposed to be a solid mass, or should it be porous and full of holes? A. It is compelled to be solid to be waterproof.

Q. Will you explain how holes like this (indicating on the object under consideration) can get into the asphalt waterproofing—how they get in it? A. It is created by the asbestos covering being damp, saturated, or having moisture in it, creating air bubbles.

When this material is poured hot, the air and moisture working out of that covering, that insulation, creates bubbles, and the expelling air from the magnesium contributes to that, and at that same time, in the process of cooling it leaves that hole.

Q. Can it be caused in any other way? A. In my judgment it cannot if it is properly poured hot.

Q. That is what I am trying to get at.

Suppose it is not poured hot. A. If it is not poured hot, of course, the waterproofing would not go around the pipe; it would never reach around.

Q. What does the heat do? Would it solidify it or liquefy it? A. Heat liquefies it.

Q. Heat liquefies it? A. That is right.

80 Q. And must it be very liquid when it is poured? A. It is compelled to be or it would not go down into the place, in the proper channels.

Q. If it is not sufficiently hot and if it is not sufficiently liquid, what will happen when you pour it? A. Well, if it is not sufficiently hot, it would not pour, it would never enter into the channel where the proper waterproofing is to be poured; it would also have quite a lot of bubbles—it would be like throwing cold water on a steam line, as soon as it hits the pipe, it would stop and not go around the body of the pipe.

Q. So, holes like this could be also caused by failing to have the asphalt sufficiently hot and sufficiently liquid at the time it is poured.

Is that correct? A. That is correct.

Q. Now, have you another piece of material that came out of the job at the time the work was done over? A. Yes.

Q. Where is that? A. This (indicating another object) is the piece of material taken out of a field joint, a straight run of pipe, where the waterproofing compound instead of being on top of the pipe was on top of the covering.

Q. When you say "on top of the covering" what do you mean—the insulation? A. The insulation, instead of around the pipe, between the pipe and the waterproofing.

81 Q. When you say "instead of being outside the covering" you refer to this piece (indicating) and this piece as the covering? A. That is correct.

Q. And instead of being outside here (indicating) as it is here, where is the waterproofing? A. The waterproofing has left the top, as you can see, and gone down and contacted with the steam pipe itself, the waterproofing instead of being on top of the pipe is inside the casing and around the steam line itself.

Q. Will you explain—I want to mark these two pieces of these pipes—

Did these pieces come out of the field joint, one of the field joints on the job? A. That is correct.

Mr. Hilland: I offer this in evidence, too.

Mr. Fitzgerald: I have no objection.

(The objecting question about which the witness had just testified was thereupon received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 27.")

* * * * * * * * * *

82 Q. Mr. Crockett, referring to "Plaintiff's Exhibit No. 27" will you explain how the waterproofing, the asphalt waterproofing, can get from the outside to the inside of the magnesium insulation? A. Just as it is indicated on that sample, it goes down between.

Q. Will you keep up your voice?

Mr. Middlemiss has complained to me that he cannot hear you.

Now, please answer that question again.

A. In that particular case, it is proved there were cracks in the covering and the hot water proofing ran down through the covering and came in contact with the steam main.

Q. When you say the covering, the insulation material, you mean the magnesium covering? A. That is right.

Q. The magnesium insulation? A. That is right.

Q. Now, will you explain how the liquid asphalt waterproofing could run down through that? A. Well, the heat from the steam main, by the crack being in the covering wall, came in contact and got to this waterproofing and melted it.

Q. Well, how many layers of the magnesium insulation would they have? A. It was double thickness, two layers.

Q. Two layers? A. Two layers on the steam main; that is correct.

83 Q. Is that magnesium insulation put on in one piece or put on in blocks? A. Well, that is put on in blocks, overlapping—overlapping blocks.

Q. When the second layer of that magesium insulation is placed on top of the first how should it be placed with respect to these openings (indicating)? A. The joint should be overlapping, staggered, so the seam would not come one directly over the other.

Q. Did they stagger it when they laid the insulation in this case?

What did you find?

Mr. Fitzgerald: May I ask you to define the staggering you are talking about?

Do you mean of the field joints or the main pipe?

It is not clear to me.

I would like to get that clear.

Mr. Hilland: All right.

By Mr. Hilland:

Q. Did you find any other places— A. (interposing) We found it in the sections of the length of the pipe that came to the job.

In some cases the magnesium insulation material we found was not staggered; we found in some cases the seams were one over the other, which allowed the material to go through.

Q. How about the case on field joints? A. With the field joints, I would say in some cases they were not properly joined to the pipe by having cut the casing back.

Q. Will you take this piece and illustrate how they did it,
and show what the failure was in the case of the field
84 joints?

Illustrate it and keep that end (indicating) to the jury so they can see what you are doing, and keep your voice up. A. (demonstrating) Well, when the pipe comes to the job it is in twenty foot sections.

We would say that the pipe would extend eight inches, and the next piece the same and this (indicating) would be over here (indicating) and the space left to weld the joints in the same amount.

In covering the joint and building up the insulating material around the open end, the first step would be to cut back the casing here (indicating) to get three inches of bondage space so that the waterproofing, when the compound was poured to the section here there would get in there (indicating) and after that cutback a magnesium block, insulating material, was placed around the job in double layers and in that case in four inch widths.

Q. When they welded or sealed that, did they stagger it? A. In some cases we found it was not staggered.

Q. And then, what was the next process? A. The next process was to mix a plaster magnesium covering on it, an asbestos covering on it, into a plaster that would work with a trowel and smooth it over that insulating material to make sure that there was no crack there for waterproofing to go through, and in some case we found, instead of overlapping the joints, the field joints would butt up together here (indicating) which left no bonding space for the waterproofing to cling to this section of the covering (indicating).

In other words, it did not seal properly.

85 Q. What did you find in those cases with respect
to the pieces of magnesium block that came up
against this end (indicating)? What did you find in re-

spect to this crack that occurred there (indicating)? A. We found a space there where the insulating material was not joined tight together, leaving a crack or space for the waterproofing to run down and come in contact with the steam main itself.

Q. Now, with the asphalt waterproofing running down in that character, what was the result? A. Well, immediately your waterproofing was broken down. It was not sealed at all.

The moisture entered through the absence of waterproofing.

Q. In other words, when the waterproofing went down—

Mr. Fitzgerald (interposing): I object to the leading questions.

By Mr. Hilland:

Q. After the waterproofing ran down next to the pipe, what was the condition of the outside of the magnesium insulation? A. It left the magnesium bare; there was no waterproofing over it at all when that occurred.

Q. What happened to the magnesium insulation then? A. Of course, the magnesium insulation, the insulating material, once it became saturated with water—

Q. (interposing) Will you speak to the jury?

What happened to the magnesium insulation when it became exposed to moisture? A. It was destroyed.

86 Q. And when you say—what insulation power did it have or effect did it have after it became wet? A. None at all.

Q. When you say "none at all" you mean it was the same as though the pipe were exposed entirely without any insulation? A. Yes.

Q. Now, Mr. Crockett, did you find anything with respect to the thickness of the magnesium insulation?

Well, strike that out.

Did you find any difference in the thickness of the layers of magnesium insulation actually used and those that were recommended by the defendant, the Ehret Company?

Mr. Fitzgerald: Just one second.

I wonder if you can place that as after the material was destroyed or when it was delivered to the job.

By Mr. Hilland:

Q. Well, first, when it was delivered to the job.

Did you find any difference? A. Yes, we did.

Q. All right. What did you find? A. The Ehret Company's scale of materials recommends that the covering for seventy-five pound steam line should be three inch thick, double standard, three inch thick.

Q. Is this the catalogue to which you have just referred (exhibiting a document to the witness)? A. (after examining the document last above referred to) That is correct.

Mr. Hilland: I offer this in evidence.

Mr. Fitzgerald: I have no objection.

87 (Thereupon a catalogue of the Ehret Magnesia Manufacturing Company was received in evidence and was marked by the reporter "Plaintiff's Exhibit No. 28" and was returned to the hands of counsel offering it.)

Mr. Hilland: I am reading from sheet D-P 302 in the right hand lower corner. Durant * * *

By Mr. Hilland:

Q. Is that the one to which you referred a moment ago? A. That is right.

Q. And the temperature on this line, you testified yesterday, was how much? A. It carried from seventy-five to eighty-five pounds of steam on the line.

Q. What was the temperature? A. 320 degrees.

Q. Fahrenheit? A. That is right.

Q. Was the insulation on the pipe, when they delivered it, three inches thick? A. The insulating material was two and a half inches thick.

Q. Now, their contract with you dated, or their proposal dated April 21, 1942, which has been marked "Plaintiff's

Exhibit No. 6" called for a one inch thick coating of high melting compound, non-porous, asphalt.

Now, the asphalt that had been applied to the insulation covering, did you observe its thickness at the time it was delivered at the job? A. Yes.

Q. Did you find, in all cases, that it was one inch
88 thick? A. No.

Q. You did not? A. No.

Mr. Hilland: I believe we have gone into that, your Honor, and explained this morning that it varies from one quarter of an inch—

Mr. Fitzgerald (interposing): Just one second.

I object to counsel stating the evidence.

Mr. Hilland: All right.

By Mr. Hilland:

Q. Now, did you find that the asphalt waterproofing used had a high melting point? A. We found that it disintegrated—

Mr. Fitzgerald (interposing): Just one second.

The Court: I sustain the objection.

The Wtness: No. I answer "No" to the question.

The Court: Let him answer the question.

Mr. Fitzgerald: Well, your Honor—

The Court (interposing): Let him answer the question.

The Witness: "No" will be my answer.

By Mr. Hilland:

Q. You answer "No". A. My answer—

Q. (interposing) Is "No"? A. Yes.

Q. Now, will you explain what you mean by high melting point? A. It means at what temperature that waterproofing would become disintegrating or would disintegrate and run.

89 Q. Now, when that asphalt was exposed, or, rather, when this pipe was exposed to the sun, lying on the ground outside in the summertime, did that ever affect that asphalt and, if so, how? A. The asphalt became soft

and when the pipe would be unloaded or handled when it was hot, if you drop it or laid the weight on the ground it would mash the asphalt, you see; the asphalt was that soft that the weight of the pipe would mash it and cause it not to be uniform in thickness in the entire diameter of the pipe.

Q. Was the melting point of the asphalt affected by the rays of the sun? A. It was, yes.

Mr. Fitzgerald: I object to that.

The Court: I do not understand the melting point would be affected by the sun.

Mr. Hilland: He says it was.

By the Court:

Q. In what way would it be affected by the sun? A. The pipe, when it came to the job in a truck, in hot weather, loaded in a truck, with the weight of one length on another, that waterproofing was that flexible that it would have one side flat when it came on the job.

Q. The temperature of the sunlight was sufficient to do that? A. Yes, sir; that seemed to be so.

The Court: Very well.

By Mr. Hilland:

Q. Now, after that, or after those lengths of pipe were laid in trenches and welded and tested, when you tested—I believe you said you put a ten pound steam test on the line.

Is that correct? A. No. We test it with one hundred pounds of steam.

Q. One hundred pounds of steam? A. Yes.

Q. Now, when that hundred pounds of steam was applied to that line, to test it, did that show that it affected the asphalt in any way? A. Yes, it did.

Q. How did it show that? A. Through the pour-holes where this waterproofing is poured in the casing—they have holes to pour that in.

Q. Show on this where they are (indicating). A. Well, on a twenty foot length of pipe, the pour-holes would be four feet apart.

Q. Then, in this part (indicating) they would get a hole here, cut a hole out of the outside fiber casing right here indicating)? A. That is right.

Q. About every— A. (Interposing) Four feet.

Q. About every four feet? A. Yes. We noticed when the test was put on the lines, that that waterproofing would leave the casing and come out of that opening that was left to pour the waterproofing in. It got warm enough to melt to come out and run down on the side of the casing itself, and particularly on the end of the casing here (indicating) it would leave the top.

91 Q. And run out the end of the casing? A. Yes.

Q. That is what you mean? A. Yes.

Mr. Hilland: Thank you. You may take the stand again.

(The witness resumed the witness stand.)

By Mr. Hilland:

Q. Now, at the time, on September 1, 1942, when you put some asbestos workers on that job, you testified that the Ehret Company also had some coverers on the job.

Will you state whether or not those workers they had at that time were asbestos workmen or some other kind of men? A. They had two asbestos workers that worked through the job.

The rest of them were plasterers.

Q. Plasterers? A. That is correct.

Q. In connection with the installation of the field joints and joints on the expansion loops, did they ever make any statements to you with respect to the kind of experience the coverers required or needed before he did that work? A. Well, of course, they have always claimed they could not get experienced men—

Mr. Fitzgerald (interposing): I object.

The Court: I sustain the objection.

Mr. Hilland: Yes.

By Mr. Hilland:

Q. What kind of training did they explain or represent was required? A. A man would have had to have had training in that particular kind of work in order to make a proper job. He would have to be a pipe coverer and not a house plasterer who never had any experience. 92

Q. How many plasterers did they have on the job making these field joints? A. My records will show that. I don't know whether it was five or six, and they had, at times, five and sometimes six.

Q. Now, when this line was tested, will you explain what conditions you found within the expansion loops as distinguished from the conditions you found in the field joints where the line was straight, and, if you will, take one of these drawings and explain.

I refer now to Plaintiff's Exhibit No. 22 (handing the exhibit in question to the witness). A. Will you give me the question again?

Mr. Hilland: Mr. Middlemiss, will you read the question?

The Reporter (reading):

"Q. Now, when this line was tested, will you explain what conditions you found within the expansion loops as distinguished from the conditions you found in the field joints where the line was straight, and, if you will, take one of these drawings and explain.

I refer now to Plaintiff's Exhibit No. 22."

The Witness: We found in the joint, in connection with the expansion loops which would be these points here (indicating on the exhibit) that no waterproofing had ever filled the top of that joint completely. The casing showed that the waterproofing had not been poured full in the joint, thereby leaving a hole where moisture could run down in the pipe and, in quite a few instances, we found it was filled with mud; the waterproofing had left these joints and run down inside and come in contact with the steam main itself which, as you see, goes through that chamber (indicating). 93

The waterproofing had melted away from the joint and run down in the chamber and filled the expansion chamber half full with waterproofing.

By Mr. Hilland:

Q. What was the purpose of that expansion chamber? A. The purpose of that expansion chamber was to take care of any expansion in that steam main that occurred.

Q. Was any asphalt waterproofing supposed to be inside that expansion chamber at all? A. No, no; definitely no.

The purpose of the expansion chamber is to take care of the expansion in the pipe line so it can move freely through that group which naturally does expand approximately one and a quarter inches to a hundred feet at the temperature on that line.

Mr. Hilland: All right. Thank you, Mr. Crockett.

Take the witness stand again.

(The witness again resumed the witness stand having left it for the last demonstration above referred to.)

By Mr. Hilland:

Q. During the progress of this job originally, in the original installation of it, did Mr. Droba or Mr. DuBois or any other representative of the defendant company ever give you any instructions of any kind that you failed to follow? A. None at all. 94

Q. Did they ever complain to you that either you or any of your superintendents or foremen on the job, had failed to follow any of their directions? A. No.

Q. Did they ever complain to you that the progress of your work was running too far ahead of theirs? A. No.

Q. Now, after these test holes were dug from manhole A down to the end of the line, were defects found all along that line, or just in part of it? A. Some sections were better than others, but it was found defective wherever we had it uncovered.

Q. All the way down clear to the end? A. Yes.

Q. Now, after these defects were discovered, did you have a series of conferences with the office of the United States Engineer? A. I did.

Q. And as a result of those conferences were you ordered to do over any part of this job, that is, the installation and waterproofing? A. I was.

Q. And what part were you directed to do over? A. Beginning at the pump room.

Mr. Fitzgerald: Point that out.

By Mr. Hilland:

95 Q. Will you point that out, please? A. Beginning at this point (indicating) we were to uncover the steam line, take off the magnesium covering, clean the line, and replace it in thermotile conduit, insulated with one and a half inch wool covering.

Q. Now, you started to say that the point— A. (interposing) At this point we started (indicating); we were ordered to start at that point and replace it to manhole A and from manhole A to the boiler room we were to uncover it and, if it were found to be defective, also replace that.

Q. Was that later found to be defective? A. It was.

Q. Were you ordered what to do with respect to that? Were you ordered to do that too, Mr. Crockett? A. We were.

Q. Was that section that you have pointed out the entire section that you were instructed or directed to do over?

Was that as a result of negotiations and agreements you finally reached with the office of the United States Engineer? A. It was.

Q. Now, you say it was? A. Yes.

Mr. Hilland: If your Honor pleases, the complaint alleged, and it is admitted, as I understand it, that plaintiff called on the defendant to make this corrective work and that they refused, so I shall not go into that.

Mr. Fitzgerald: Well, now—

Mr. Hilland (interposing): In other words the demand and refusal are admitted.

Mr. Fitzgerald: No.

96 Mr. Hilland: Their answer here shows that they refused to do it on the ground that they contended that its condition was through no fault of theirs; that it was not their fault that it occurred.

Mr. Fitzgerald: That it was the fault of the plaintiff and not our fault, that is right.

Mr. Hilland: I want the Court and jury to understand that we demanded and they refused.

The Court: All right.

Mr. Fitzgerald: Wait a minute.

You want the jury to get that clear.

You demanded that we replace this so-called defective material and we refused to do so because we advised the plaintiff that the result was the cause of his own fault.

The Court: Well, there is no question as I understand it that there was a demand and a refusal.

Mr. Hilland: That is right.

By Mr. Hilland:

Q. Now, after the defendant refused to take off the insulation that it had placed on there, and replace it, did you undertake to do it yourself—that is, the plaintiff company? A. Yes.

Q. And did you keep a complete record of all the material and labor costs and other expenses that you had in connection with making that corrective work? A. I did.

* * * * * * * * * * *

109 Q. Have you checked the items in that summary with these payrolls and the receipted bills that have been received in evidence? A. That is correct.

By the Court:

Q. You checked them yourself? A. Yes, sir, yes, sir; they have been checked.

By Mr. Hilland:

Q. So the total on there is the correct total of all of the items about which you testified? A. That is right.

Q. Except as to Workmen's Compensation insurance and the Public Liability insurance, the rates of which you do not know? A. I do not recall the rates now; it is the standard rate.

Q. What is the total shown on that summary and all of those items, the total of all of those items?

* * * * * * * * * *

110 The Court: I will overrule the objection.
111 Did he ever answer the question?
Mr. Hilland: No.

By Mr. Hilland:

Q. The summary shows a total of how much? A. A total cost of $19,915.06.

Q. Now I notice, Mr. Crockett, one item there about which you did not testify.

You have included ten per cent overhead and supervision expenses.

Is that a normal and a customary expense? A. Our overhead has proven to run us ten per cent.

The Court: Just answer the question.

The Witness: Ten per cent.

By Mr. Hilland:

Q. That is normal and customary? A. Yes.

Q. Fair and reasonable? A. Yes.

Q. And that covers all overhead and supervision expenses? A. Yes.

Q. Now, in your opinion is that total cost of $19,915.06 fair and reasonable?

Mr. Fitzgerald: I object to the question.

The Court: I overrule the objection.

The Witness: It is fair and reasonable.

By Mr. Hilland:

Q. And has the defendant paid any part of it? A. Definitely not.

112 Q. That was all done at your expense? A. It was.

Q. Now there is one thing I neglected to have you explain in making this corrective work, and will you tell us just exactly what you had to do from the beginning to the end of that corrective work? A. The United States Engineers—

Q. (interposing) No; just what you did. A. I have to explain what I did. I have to do it in my own feeble way.

What is the question?

Q. All right. Describe what you did from the beginning to the end of that corrective work. A. We began with uncovering the whole line, ripping off what was left of the waterproofing and insulating material, cleaning the line after that process was done and we poured a concrete base on the bottom of the trench to receive the thermotile or foundation for it, laid the lower base section and laid the pipe in the rollers and supports, and placed the pipe on the rollers and supports.

Pipe coverers came in and covered the pipe.

Then we laid the arch tile, the dome of the thermotile to seal it and, the next step, we sealed up all the cracks and joints after that was done, and the joints were properly waterproofed, inspected by the United States Engineers, passed as being completed, and the trenches filled up.

Q. Have you had any difficulty at all with that line since you did that corrective work? A. None at all.

Q. When you uncovered that line, did you ever find
113 any leaks in the pipe itself? A. No; there were not any leaks in the pipe itself.

Q. Were all the joints your steamfitters had welded entirely tight and secure? A. They were.

Q. There were no defects of any kind in the line itself? A. There were no leaks in the steam line.

* * * * * * * * * *

120 Q. Mr. Crockett, did you see this underground pipe covering as soon as it was uncovered? A. Yes.

Q. I hand you Plaintiff's Exhibit No. 31. I wonder if you might explain it to the jury (handing a photograph to the witness).

The Court: May I see one of those in the meantime?

Mr. Hilland: Yes, your Honor.

The Witness: This is a picture taken of the pipe covering after it was condemned, during the process of being uncovered and replaced by us, Crockett Engineering Company.

By Mr. Hilland:

Q. Now, Mr. Crockett, on the pipes there there is a portion of it right here—I will put it toward the jury—there is a white spot right there in the center of the picture.
121 What is that that you see? A. That white spot is the insulated material.

Q. Now, what part of the pipe is that? Is that a part that was fabricated at the factory or a field joint? A. That is a field joint.

Q. Was there any waterproofing on top of the insulation of that field joint when the outer casing was removed? A. None at all.

Q. The insulation was completely exposed, just as shown in the picture? A. Yes; just as it is in the picture.

Q. Take these other photographs. Show those to the jury. A. This is the same picture. What does it say on this one? No; this is a different type.

Q. If you will take those in order—take the next one. A. This is another picture. After this picture was taken—Before this picture was taken—this casing was ripped loose to examine this, showing the condition that existed in that joint. After this casing was ripped loose, you can see the holes in the covering where the waterproofing had disappeared from moisture entering the pipe.

This showed no tar or waterproofing at any point through that top section of casing which had ever been poured completely to seal it.

Mr. Fitzgerald: I object to the opinion, his opinion of what it was.

By Mr. Hilland:

Q. Let me ask you this question: If this joint had been completely filled with the asphalt waterproofing
122 could that condition have occurred? A. No. If that
joint had been properly filled, that condition could not have occurred.

Q. Let us have the next picture. A. This is a picture taken at loop No. 9, showing another view of the pipe and the condition in which it was found when the trench was opened.

You can see how the fiber casing has left the pipe and how the waterproofing on top of the pipe has left the top of the pipe and scattered into the bottom with the fiber casing.

Q. When you speak of the fiber casing, will you demonstrate that? A. That is the outside casing (indicating).

Q. That is a fiber. That is a form of paper? A. That is correct.

This is another view of the pipe after it was uncovered, showing the condition of the pipe and casing, and you can see that the pipe line is flattened down, showing that the waterproofing has left the top of the pipe, and here it is on the edges and sides. This is taken—a view in the trench.

Q. These pictures show the waterproofing left at the top of the pipe? A. It varies. From this picture the waterproofing has left the top of the pipe and it is perfectly flat. If you examine it closely, you can see there is no waterproofing in here. It has entirely left, completely gone.

This also is another view of the pipe in the same condition as this, as found in other cases. It is about in the same condition, as you can see.

This is a picture taken of loop No. 9, which I just
123 showed you. This is also a picture taken after they
ripped away the top of the metal casing, ripped off to show the condition of this joint.

Right here is a wooden block. That is supposed to support the casing and is used by them. That is a wooden block, a seven-eighths block, two inches long. This shows how the magnesium block was completely bare with no waterproofing over it. The waterproofing has left that section.

Q. Now, Mr. Crockett, is there anything about here on the inside of the metal casing there indicating whether or not the casing had been completely filled or partially filled with asphalt waterproofing? A. Yes. This very definitely shows the place wasn't filled with waterproofing for the same reason I tried to explain a moment ago. If that joint had been completely filled and poured, the waterproofing would have taken and held that metal casing in the waterproofing.

Q. What condition did you find on the inside of that metal casing? A. There is the condition. It is shown in the picture.

Q. I mean, on the metal itself. A. Well, the metal was just completely rusted, showing that no waterproofing had ever sealed it over, showing rust and corrosion, showing it hadn't been completely filled with waterproofing.

This is the asbestos covering, completely bare after the joint was opened.

This is about the same condition here that persisted in the others.

124 This is another photograph of the pipe taken in the trench, showing the covering completely collapsed. The casing is collapsed and no waterproofing on top of the pipe; it all having run down to the bottom and sides of the casing.

This is a picture taken of loop No. 8. The same condition existed at that point. The casing was ripped loose and the pictures taken, and you can see where the waterproofing did take in spots, or it wasn't uniform, and there is the covering left completely bare on the pipe, and the insulation material is bare and there is no waterproofing. It has disappeared.

This is a case where the waterproofing after it left the top of the pipe ran down in the expansion chambers and almost completely filled them.

This is a picture taken of loop No. 7, in the same condition.

Well, this pipe was opened here and we found this condition existed down there, and the United States Engineers asked us to make some proposition whereby this could be remedied, and you contacted one particular local engineer here.

Mr. Fitzgerald: I object to the voluntary statement made by the witness.

The Court: Yes; I sustain the objection.

By Mr. Hilland:

Q. Take your seat, Mr. Crockett.

Now, Mr. Crockett, is this insulation and the waterproofing on the pipe continuous from the boiler house clear over to the end of the line at this point on Plaintiff's Exhibit No. 8, to this point on Plaintiff's Exhibit No. 9? A. It is.

125 Q. Well, are there any breaks in the contact of the insulation at any point in between those distances? A. Contact is broken at each manhole.

Q. Now, where the pipe goes through a manhole, is it insulated? A. It is insulated to the inside finished wall of the manhole.

Q. Is it waterproofed on the inside of the manhole? A. No.

Q. The waterproofing and insulation then ends at what point with respect to the manhole? A. On the inner base of the manhole wall.

Q. Now, the manholes are approximately how far apart? A. They vary; approximately from two hundred and fifty to four hundred feet, two hundred and fifty to four hundred feet approximately.

Q. Now, if a break or leak occurs in the pipe covering at any point between the manholes where contacts are broken or where the waterproofing ends, if a leak occurs at any point between these manholes, what is the effect of that leak on the rest of the line between the manholes? A. It would destroy that entire section.

Q. One leak will destroy the entire section between the manholes? A. This would conduct moisture through the entire line from that entire section, from manhole to manhole.

Q. After these rains came that you testified about and you dried out the line with the portable boiler you testified
about, was any other method used for allowing any
126 moisture in the magnesia, in the insulation, to escape? A. Yes. We were instructed to provide vents.

Q. By whom were you instructed to provide vents? A. By Mr. Droba.

Q. By Mr. Droba, the Ehret Magnesia Manufacturing Company's representative on the job? A. That is right.

Q. Will you state to the jury how these vents were constructed? Take this exhibit as an example and point out how that vent was constructed. A. At each field joint in the pipe where the pipe joined to the other in the field, a hole was cut in the magnesia.

Q. Who cut that? A. The pipe cutter, Mr. Droba's pipe cutter.

Q. They cut the holes? How big was it? A. Large enough for us to put a piece of steel pipe on and weld it to the steam main.

Q. How did you cut the end of that pipe before it was welded? A. The end of the pipe, it was one inch pipe, and I guess we cut in a "V" shape so the heat could come out of the top of the steam vents, come up that vent and escape.

Q. What part of the construction of those vents did your crew, the steam fitters, do? A. We cut the vent out and constructed them and welded them to the steam main and left them.

Q. Then who filled in the holes around that steel pipe? A. Ehret's men.

Q. Was that done under their supervision and di-
127 rection? A. It was.

Q. About how far apart were these vents that you put in there? A. From the band stand down to F manhole, they were put in at each field joint and at each end on each fitting.

By Mr. Fitzgerald:

Q. Where was that done? A. Well, as I explained to you, in the long run of pipe, in the twenty foot sections, a vent was put in at each joint to take care of any seam that would have been sealed in the line, so it could escape out of the vent.

In addition to that at each one of these expansion bends a vent was put in as instructed by Mr. Droba.

Q. At these expansion lines, had they ever been sealed up or not?

The pipe had the waterproofing around the pipe? A. That is correct.

Q. Showing you Plaintiff's Exhibit No. 7, up here, what Mr. Fitzgerald wanted to know was at what point did you begin the vents and at what point did you stop the venting? A. We began placing vents at the band stand, at manhole C to manhole F. That would be from this point to this point (indicating), in that section.

Mr. Hilland: Your witness.

Cross-Examination

By Mr. Fitzgerald:

Q. Now, Mr. Crockett, when Mr. Droba had suggested to you to put in these vents was that suggestion made before the job was completed? A. It was made before the job was completed; that is right. 128

Q. And was it made by you prior to the time any defect had occurred? A. No; it wasn't made by me.

Q. It was made prior to the time when any defect occurred? A. It was made prior to the time of any defective work; that is correct.

Q. So then while the work was in progress, before any defect had occurred, Mr. Droba had suggested to you to put in these various vents for the purpose of allowing moisture to get off into the earth; is that right? A. That is right.

Q. Did you do that? A. We did.

Q. What was the reason for Mr. Droba suggesting that to you? A. I think Mr. Droba could answer that question much better than I.

Q. He gave you some reason, didn't he? A. The reason was to allow the moisture to get out of the pipe. The pipe had been wet at the time it was covered.

Q. The pipe was wet? A. The joints were wet and the vents must be provided to allow the moisture to escape.

Q. And that occurred first at the point around the band stand? A. That is right; from the band stand down to manhole F.

Q. Down here (indicating)? A. Yes; that is right.

129 Q. How long after was it that Mr. Droba asked you to put the vents in that you actually put them in? A. We began immediately to put them in.

Q. Do you know what time he had suggested that to you? A. My superintendent could answer that question better than I. I wasn't on the job. When he started to put them in, he can explain that better than I.

Q. You don't know of your own personal knowledge when they were put in? A. I do know they were put in. I don't know what day they were put in.

Q. Did it take a week or a couple of weeks or a couple of hours? A. It took the best part of a day to have them welded to the pipe.

Q. Now, Mr. Crockett, when pipe was delivered on the job by the Ehret people, did it come in trucks? A. That is correct.

Q. And you paid for the material when it was delivered? A. That is right.

Q. Did you see the material when it was delivered on the job? A. I saw it in some instances when it was being unloaded from the truck, and I saw it on the job.

Q. On the ground? A. Yes. I inspected the job sometimes twice a day.

Q. When material was delivered on the job by the Ehret Company, what was its condition? A. It was in very

130 poor condition.

Q. What do you mean by very poor condition? A. Well, the waterproofing in some places wasn't true; it wasn't uniform around the surface of the pipe.

Q. Now, was any of that material put into the ground by you? A. Our work was to weld the pipe in the ground. We didn't make any field joints.

Q. I am not talking about field joints. I am talking about the condition of the pipe that was delivered on the job.

You took it from the trucks and you placed it in the trench that you had prepared? A. That is right.

Q. To receive the Durant system? A. That is right.

Q. When they arrived at the scene of delivery before you placed them in the trench, what was the condition of the material? A. We found that the waterproofing wasn't uniform. In some places on one side of the pipe it would be very thin and on the opposite side it would have been one half or an inch and a quarter thicker.

Q. Did you call that fact to the attention of Droba or any of the Ehret people? A. I did. I called it to Mr. Droba's attention.

Q. And did the inspectors, the Government inspectors see it? A. Yes, sir. They held up the first load of pipe that came to the job. It was held up and they wouldn't allow them to unload until the Engineer's office passed on it.

131 Q. What happened to it? A. After they approved it, we put it in the trench.

Q. Then the inspectors on the Government job approved the material that was delivered at the site by the Ehret people before you put it in the trench? A. It was approved on the site; that is correct.

Q. That is not the question. A. The Government didn't approve anything until the job was placed in operation.

Q. I am asking you: When the material was delivered—I am talking about the twenty foot lengths now—they were delivered to the site at the War College by Ehret? A. That is correct, sir.

Q. Then it was inspected by the United States inspectors, was it not? A. That is right.

Q. Now, after it was inspected by the United States inspectors, you took it and placed it in the trench, did you not? A. We put it in the trench and welded the ends together in the trench; that is correct.

Q. So when you put the Ehret material, the Durant pipe, into the trench prior to the welding, it was approved by the United States inspectors? A. It was inspected by the United States inspector on the job; that is correct.

Q. That is the same as approved, isn't it? A. We consider approval when they finish the job.

The Court: You are playing on the meaning of words. He can state what he means.

132 The Witness: The Government doesn't approve any job until final acceptance.

By Mr. Fitzgerald:

Q. I am not talking about the approval of the job. I am speaking of the approval of the material that was delivered to the site by Ehret. A. They approved it in accordance with the contract requirement.

Q. And they passed it as being satisfactory? A. To the contract requirements.

Q. To the contract requirements? A. Yes.

Q. And then you put it into the trench? A. That is right.

Q. So then every piece of material that was delivered by Ehret to the job was approved or satisfactory to the inspector of the Government? A. That is right.

Q. So no material went into the job that wasn't approved? A. All materials that you shipped to the job went into the job.

Q. And it was approved? A. It wasn't approved in the final analysis. It was condemned.

Q. I am not speaking about that. We know that broke down ultimately. There is no question about that.

What I am trying to get from you, sir, is that when that was delivered by Ehret to the War College, it was passed
and inspected by the United States inspectors, the
133 material was, and after it was O.K.ed or approved
by the United States inspectors you placed it in the
trench? A. That is right.

Q. So that every bit of material that was delivered by us to you on that job passed the United States inspectors? A. As to the contract requirements.

Q. Yes. Then it was placed in the trench? It was your duty to weld the joints, the various joints every twenty feet; is that right? A. I didn't say it was my duty.

Q. It was your obligation under the contract, wasn't it? A. No.

Q. It wasn't an obligation? A. No mention was made of vents in our contract.

Q. It was supposed to be welded? A. It was suggested we do it, to be cooperative in the progress of this job.

Q. I am not talking about vents. I am talking about the joints where the pipes joined together. A. We welded the ends of pipe together.

Q. That was your job? A. That is right.

Q. And after you welded the ends together, there was a test made by you, wasn't it? A. That is right.

Q. And what was the purpose of that test? A. To make sure that the steam line was completely tight, and had no leaks in it.

Q. How was that test made by you? A. By cup-
134 ping up the ends of the line and putting one hundred
pounds of steam pressure on from the boiler line.

Q. Isn't it a fact that when you did that you didn't use a hundred pounds of steam pressure from the boiler room because there was no connection? A. I beg to differ with you, sir.

Q. Didn't you use water pressure to determine whether or not that was properly welded by you? A. We used water pressure on the first section, but the line had to be tested in the final analysis with the one hundred pounds of steam pressure.

Q. When you joined those joints together, the steel pipe, you welded them, didn't you? A. That is correct.

Q. And then there was some pressure applied? A. The first section was by one hundred pounds water pressure.

Q. There wasn't any steam used on that at that time? A. No.

Q. Where was that section? Will you identify that for us on the plan? A. We tested that under water pressure down to this manhole (indicating).

Q. Beginning where? A. Beginning by the boiler house.

Q. Beginning by the boiler house? A. Yes.

Q. Down to where? A. Down to—I am not sure if this is the manhole. I would rather have my superintendent testify about that. 135

Q. You made certain statements here. A. I can be safe in saying this section of the pipe, this manhole, was tested under hydraulic water pressure, one hundred pounds pressure.

Q. So there was no steam used on there? A. No.

Q. So your water pressure was merely for the purpose of seeing if the leakage was there before using the steel pipe? A. After all, if the pipe was placed under one hundred pound steam pressure or used—

Q. (interposing) I am coming to that later.

Do you know the distance from the boiler house to this section here? That is a manhole here (indicating)? A. Yes, sir.

Q. What number is that? A. Manhole E; approximately eight hundred feet.

Q. Approximately eight hundred feet? A. Yes.

Q. What was here at this section to stop the water from coming through? Did you block it up at that end? A. The manhole.

Q. Now, the Durant pipe— A. (interposing) We put—where the welds enter the manholes, we caulked them with waterproof compound. Where the welds are in the manhole, all these welds were made tight by caulking them with okum and pouring that with waterproof compound.

Q. Then there was a stoppage so the water would
136 not run out of the end of the pipe in order to test they were waterproof at each joint; is that right? A. The end of the pipe was plugged up and then the water was put in and then pumped out.

Q. You found the weld to be O.K.? A. Yes.

Q. From this manhole down to F, what system was used to test that particular point? A. The same method.

Q. So you used that method of water? A. Down to that manhole.

Q. Did you use the same method? How far does it go over? A. Ending over here.

Q. It goes out in that shape? There is an Officer's Mess down to manhole E? Did you use the same system? A. No.

Q. What system? A. Steam pressure.

Q. Where was the boiler room? Here? A. Yes.

Q. With that steam pressure on that? A. Yes.

Q. Did it show at that time it was tight and O.K. as to welding? A. Yes, sir.

Q. Now, during that period of time the rains came and the place became flooded? A. That is correct.

137 Q. How much of this material was exposed? Some wasn't exposed? A. From the last manhole I designated, all the way back to the boiler room was practically open. From this point (indicating) all the way back to the beginning point.

Q. To the beginning point the manholes were exposed in the trench without any sealing at all? A. Yes.

Q. You may resume your seat again.

So then the Durant system became submerged in water, did it not? A. At times it did.

Q. All along that line? A. Yes.

Q. And there was no sealing made in the joints? A. No.

Q. Now, was the Durant system laying on the ground at that time? It didn't have any cradles under it at all? A. We had some bricks under the bottom of the trench.

Q. Supported in the trench? A. The pipe we had laid in the trench.

Q. You know, as a matter of fact, that when water gets into magnesia it absorbs water; is that right? A. That has been a proven fact.

Q. And then it becomes deteriorated? A. That is right.

Q. And if steam is put on that magnesium breaks down? A. Yes.

138 Q. And the heat from the magnesium and water will break the insulation material or, rather, the waterproofing material, the asphalt, if the moisture is sealed in the casing? A. Yes.

Q. Now, what was done by you, Mr. Crockett, to prevent water from getting into these various joints?

Mr. Hilland: Just a minute. I object, if your Honor please, there was no duty on them. He wasn't doing the water-proofing. It was their job to do it.

Now, he wants to know what he did to prevent the water from getting into something they were supposed to waterproof.

Mr. Fitzgerald: That is not the point.

Here the material is exposed. He had put his welds in there and that material is exposed to the elements.

Now, I want to know what he did to prevent that.

The Court: You mean, if it was exposed to the elements?

Mr. Fitzgerald: Yes, your Honor, what he did to prevent it before or after.

The Court: Was it incumbent on him to prevent it before?

Mr. Fitzgerald: Yes.

The Court: Under what provision of the contract?

Mr. Fitzgerald: This is what we are supposed to do. Under our contract we are to supply the steel pipe for the supply and return. Our price includes the following: All necessary standard weight steel and wrought iron pipe, the insulation, asphalt, and the casing to insulate the field joints. That is where the lengths of pipe are joined together in the field, except joints not exceeding eighteen inches in length. The labor to install the pipes above referred to and pipe and welding ells made by the expansion loops.

139 Our price does not include excavation and back fill. That is not our job. Installing the pipe in the trenches. That is not our job but their job. They were supposed to weld the pipe. That is not our job.

They were to lay the pipe in trenches, do the welding and the mechanical work and install the welds where a conduit system enters a manhole.

So then the point is the obligation under that price we are not to include are the items that are the responsibility of the general contractor. So then when the material was delivered to the job, the plaintiff put it in the trenches and welded it, and it is his obligation to see to it that while that stuff remained in the trench exposed in the fashion it was exposed, it was his obligation to take care of it and prevent it.

Our obligation didn't begin until after the welding had occurred and tested. Then there was no water in it.

He allowed this to be exposed in the trench where it was submerged in water. Consequently, it is his obligation.

Mr. Hilland: If your Honor please, my answer to that is he didn't read from their contract. In the first paragraph of the contract it provides that we will furnish Durant steel pipe for the steam distribution system, both supply and return, at the Army War College, in accordance with the plans and specifications and as detailed in this offer.

He read part of what is detailed in the offer but he didn't read what is in the plans and specifications. Let us take the plans. The plans provide that the manufacturer of the underground equipment shall guarantee the installation of his equipment. They guarantee the installation of their equipment.

140 When we come to the specifications we find they provide for certain conditions under which they shall furnish and install this underground equipment, and then it provides the line shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety per cent or more and properly installed to allow any expansion and contraction without damage to any part of the installation.

Here is the important thing: The underground installation shall be made in accordance with the manufacturer's recommendation and shall be completely waterproof.

Now, they delivered all these eighteen and twenty foot lengths of pipe with insulation on it, all except about eight or nine inches at the end, and there the magnesium is exposed and they delivered it on the job.

What he is arguing is that because they haven't waterproofed the ends that it was our job to do that.

Mr. Fitzgerald: No.

Mr. Hilland: That is what you are arguing.

Mr. Fitzgerald: It was your job to protect it.

Mr. Hilland: It was definitely part of the waterproofing.

The Court: I will let this stand for the present without ruling finally on the effect of it.

Mr. Fitzgerald: Will you read the question?

The Reporter (reading):

"Q. Now, what was done by you, Mr. Crockett, to prevent water from getting into these various joints?"

The Witness: There was nothing at all done up until we reached near the band stand in laying pipe. Mr. Droba suggested at that time we protect the ends, and we went down to get some stuff, roofing cement and plastered
141 the ends of it to make some effort to protect it, but we found that would not take that, the magnesium, the roofing cement would not adhere to the magnesium, and I presume moisture continued to enter the casing.

By Mr. Fitzgerald:

Q. Wasn't there moisture in that casing? A. Moisture was compelled to be in the casing when it was under water. It was under water several days.

Q. So when you put the cap over there, the magnesia on the interior was still wet?

Mr. Hilland: But he didn't say after it had been.

By Mr. Fitzgerald:

Q. Is that correct, sir? A. We undertook to buy roofing cement and tried to protect it, before it was laid in the trenches, and while it was in the stock pile on the ground, and we found it did no good at all.

Q. Do you understand my question? A. You asked me previous to that—

Q. (interposing) When you put the casing there, you say you used cement? A. Roofing cement.

Q. When you put the cement over the exposed material the water was still inside the interior of that? A. Definitely so.

Q. Now, before you did that, before you covered this casing, or with the cement you testified about, did you make any effort to drain the moisture? A. No, we made no effort to drain it. It wasn't our job to do it.

142 Q. Is that your conclusion that it wasn't your job to drain it? A. We were not asked to drain it. We had nothing to do with that. We were not familiar with that type of insulation.

Q. Didn't you testify that Mr. Droba had suggested getting the moisture out of it and that you used vents? A. It was a suggestion to get the moisture out of it. It was a suggestion.

Q. Did I understand you to say that the reason why you were suggested by Droba to put the vents in was to prevent the moisture from getting in? A. That was his idea to prevent it from getting in, but it had gotten in.

Q. Isn't it for the effect of getting the moisture out? What are vents used for, sir? A. Are you speaking about vents or the sealing up the ends of the casing?

Mr. Hilland: He has the witness confused.

The Court: Let him explain now.

The Witness: The point that Mr. Droba brought up on the job to my superintendent that it would be a good idea—we were having a lot of trouble with rainwater during installing the pipe, and we might try some sort of roofing cement to seal up the pipe as it was delivered to prevent the water from getting in the end of the casing, and we tried that and it didn't work. It fell off.

By Mr. Fitzgerald:

Q. Then you get back to the same question: When you used the roofing cement over the exposed magnesia, 143 that magnesia on the interior was wet, was it not? A. It was wet when it was put on there, and it fell right off. It didn't stay on.

Q. Didn't Droba tell you at that time that you should put vents in there to draw off that moisture? A. Not at that time; no.

Q. When did he tell you? A. He had us put the vents in there as his men made the field joints, sealed the joints, and he suggested the vents be put in to let out the moisture.

Q. So these were put in to let the moisture escape? A. According to his instructions.

Q. Didn't he suggest at the same time that you put the cover over it as you put in the vents? A. No.

Q. You knew it was wet, didn't you? A. Anyone was compelled to know it was wet from the rains we were having. It was under water for several days.

Q. So you knew at that time if the interior was wet, when you tried to seal it off with the roofing cement that you speak of, that if any water was, or any steam pressure was placed on that that the moisture or wet magnesia would begin to boil or heat, wouldn't it? A. After this pipe became wet, Mr. Droba suggested the vents be put in.

Q. But you haven't answered me. A. No, Because for the reason that that pipe had to be taken off.

Q. Now, after you finished making your water
144 pressure test down to, I think, the point you made
it is point "E"—is that the manhole? A. Down to the next one.

Q. That is when you made your first water test? A. The last water test.

Q. The last water test? A. Yes.

Q. At that time all these joints were exposed? A. They were placed in the ditch, sealed together, and left exposed; that is right.

Q. The water got in there from the rains? A. Some of it was laid after the rains. That we laid after the rains we plastered up as he suggested.

Q. Was there any in here after the rains? A. His suggestion was made after we reached this point, passed the band stand, that we used some plaster for to plaster up the ends each day as they laid down.

Q. From here to here (indicating)? A. Yes.

Q. Did you have some material over here back to the boiler house? A. No.

Q. That was still exposed when the rains came? A. Yes.

Q. He told you to seal it up? A. We were not supposed to seal it up.

Q. Did he tell you to seal it up? A. No.

Q. You are probably confused. You have said
145 that Mr. Droba had suggested to you that you get
some roofing cement to prevent it from getting wet.
A. That it might be helpful, was the suggestion.

Q. Now, those joints there aren't sealed after they are fixed up by you with the roofing cement? A. As we laid pipe, a load of pipe would come to the job, and when we laid that pipe water hadn't touched it, and we went down and bought roofing cement and plastered the ends of that pipe up in case rains came and it might protect it so that he could get his joints made. When he came in to make his joints, he had to cut them out.

Q. Let me ask you this now: From the band stand back to the boiler house, it was still exposed too, wasn't it? A. That is correct.

Q. Why didn't you put the same kind of material, roofing cement, around that back place there as you did here? A. Because it hadn't been suggested to us.

Q. It had gotten wet, hadn't it? A. Yes.

Q. But this material hadn't gotten wet? A. At that time; that is right.

Q. Did it get wet after? A. When the rains came it got wet and the roofing cement would not stick; yes.

Q. You said that Droba hadn't told you about it back there? A. I suggested it might be helpful.

Q. Is it because that suggestion was made from the boiler house on, as I understand it? A. I can't hear very well. You will have to get back to me.

146 Q. Every bit of this material that was laid in the trench by you and before it was sealed by the Ehret Magnesia Company, each one of these ends remained down there the same as these exposed ends? A. Just as they came to the job.

Q. So that if water got in there, it would attack the magnesia and become saturated and it would go all the way through, wouldn't it? A. That is right.

Q. Now, then, when he, Droba, had suggested when you get down here to the band stand that you would cover the material with this cement, or had suggested it from the band stand on down? A. I suggested that we cover it as it was loaded out of the truck and protect it on the stock pile.

Q. Did he make any reference about that? A. No.

Q. Did it ever occur to you that it should be? A. No.

Q. Did it ever occur to you that you had to drain the moisture out of that remaining portion from the boiler house down to the band stand before any seal was made? A. It never occurred to me. It wasn't part of our work.

Q. It was wet? A. It was compelled to be wet. It was wet.

Q. Now, let me ask you this: Did Mr. Droba's men or the Ehret Magnesia men ever seal up any of that material while it was wet? A. Yes.

147 Q. Where?

Show me where. A. Well, I would say it was compelled to be wet and should—

Q. (interposing) Show me where, if you will, please. A. Just north of the band stand. When we saw them covering the joints after we dried these out, we still thought those are too wet to cover and seal up so the suggestion was we put vents on there.

Q. It was wet? A. Yes.

Q. And it was actually wet when they sealed it? Were you on the job to see it? A. I was on the job.

Q. Were you on the job to see that the joints were set when they were sealed by the Ehret Magnesia Company? A. Mr. Droba said the joints were wet. We took Mr. Droba's suggestion.

Q. Were you there when they sealed it? A. I was there when they first began to put the vents in.

Q. I am not asking you that. I am asking you whether you were there at the time when the Ehret Magnesia Company actually sealed the field joints or any of the ells or the expansion loops when the material was wet? A. I was there a couple of times during the day.

Q. Do I make myself clear?

The Court: He said he was there.

By Mr. Fitzgerald:

Q. Did you see them seal these joints up when 148 they were wet? A. We took Mr. Droba's suggestion.

Q. I am asking you if you saw the Ehret Magnesia Company's men seal up the joints when the material was wet? A. I will answer that "No."

Q. You didn't see it?

Did you ever see them seal the joints at any time? A. Yes; I watched the progress of the job being made.

Q. So that I take it from your answer that the time that you actually saw them seal the joints up it wasn't wet? That is your answer? A. I would not be in a position to swear whether they were wet or dry. I wasn't that much interested in whether they were wet or dry. It was his job.

Q. You say you were not interested in whether or not they were sealed while wet? A. It wasn't to be my business whether they were wet or dry. It was Mr. Droba's.

Q. If they did seal any of these joints up while they were wet, you owed a duty to the Government, didn't you, or responsibility, or with the United States Engineers? A. That is correct.

Q. What is that? A. Our responsibility was with the United States Engineers.

Q. And the Ehret Magnesia Company was your sub-contractor? A. That is right.

Q. So that anything they may have done or failed to do you knew would come back on you; is that correct, sir? A. It did come back on us.

Q. It did come back on you? A. Yes.

149 Q. Did I understand you to say that it didn't make any difference to you whether they sealed it wet or dry? A. I didn't make that statement. I must have misunderstood. I left it entirely to them, the Ehret Manufacturing Company, who was responsible. It was for them to see that they weren't wet, or dry.

Q. You never saw them seal them up while they were wet? A. No. I answered that question once.

Q. It was quite material to you, sir, that this job would be done properly? A. Quite right.

Q. Now, did there come a time when there was a dispute or with reference to your complaining to Mr. Droba, or the Ehret Magnesia Company, about delays? A. Very much so; all the way through.

Q. Was that delay caused by the material not being sent on time? A. Correct.

Q. Now,—

Mr. Hilland (interposing): May I suggest that the witness resume his seat?

By Mr. Fitzgerald:

Q. Oh, yes. Excuse me.

You complained to the Ehret people about the slowness of the delivery of the material, didn't you? A. It was more complaint about the pipe coverers getting on the job and making the field joints. That was causing the delay in the progress of the job.

150 Q. So then you notified them that you were going to take over, didn't you? A. That is right.

Q. And you did take over, didn't you? A. To the extent that we provided pipe coverers on the job.

Q. You mean by pipe coverers, to seal the joints up? A. That is right.

Q. Now, there was a dispute between you and the Ehret people about you hiring non-Union men? A. Yes.

Q. And they told you if you undertook to take the job over yourself and put non-Union men on there that you would be responsible? A. No.

Q. They didn't? A. They wrote a letter after that had happened.

Q. Didn't they write a letter before?

The Court: Is there anything in the contract about Union labor, in the general contract?

Mr. Fitzgerald: I think the general contract with the United States Government provides for that.

Mr. Hilland: I should say not. No, indeed.

The Court: Then I don't think it is important.

By Mr. Fitzgerald:

Q. You did undertake, however, to take over the job? A. On the instructions of the United States Engineers.

Q. Would you show me down here again as to where and when your men took over? A. I have a letter in

151 there in detail, a letter to Ehret telling what work those men did, what they did.

Q. Let me have that.

Now this is taken from counsel's file, dated September 4, 1942. Would you see if that is it (handing a paper writing to the witness)? A. (after examining the document last above referred to) This is the letter to which I referred.

Mr. Fitzgerald: I would like to put that in evidence, if you will, please, and mark it Cross-Examination No. 1.

The Court: Very well.

(Thereupon the document in question was marked by the reporter "Defendant's Exhibit No. 1 for identification.")

Mr. Fitzgerald: May I read it to the jury?

The Court: Yes.

Mr. Fitzgerald: This is a letter of Crockett to Ehret • • •

By Mr. Fitzgerald:

Q. Now, Mr. Crockett, will you come down here and point out for me, please—would you point out what you did there with your men? A. Give me the first item.

Q. Made joints and poured drops one and two. A. This is Drop No. 1 at this point (indicating). It takes a loop and two joints there, and we made those joints.

Q. Where did they extend to? A. This is Drop No. 1 and we made joints at that point, and this would be Drop No. 2 at this point and we made those drops.

152 Q. Was there any pipe in here at all? A. No straight joints.

Q. So these were all loops? A. Yes; drops.

Q. Drops? A. Yes.

Q. Now, point out where you made joints and poured loops 3 and 4? A. This is loop 3 and this is loop 4 (indicating).

Q. Now, they extended down here (indicating)? A. This loop and this one here.

Q. You began from here, with this, and got to here? A. This drop was shown right there.

Q. Where did the first failure—the material failed all the way up to there? A. The material was placed, replaced, from the bottom here to here (indicating).

Q. You started here (indicating)? A. We only made two joints on this part and this pipe wasn't covered.

Q. Who was that pipe covered by (indicating)? A. Ehret Magnesia.

Q. It had been covered at that time by them? A. No.

Q. Not covered by them at that time? A. No. It could not have been covered by them or we could not have covered it.

153 Q. Are there any pipe joints to cover this point at loop 1? A. He had covered practically up to this manhole (indicating).

Q. And that wasn't finished? A. When we brought non-Union men, we started here and at this drop.

Q. How far did these drops extend? A. Well, they dropped down in that distance, elevation, a distance of four feet.

Q. You made the joints and poured loops No. 3 and 4? A. Yes.

Q. Where is that? A. This is three and this is four.

Q. And you poured Loop No. 5? A. Does the letter say that?

That is right. There is 5 right there (indicating).

Q. And you finished making the joints and your men poured loop 6? Where is that? A. Right there (indicating).

Q. Is that what you finished? A. That is loop 6. You asked me where loop 6 is.

Q. And you finished making joints at that time around 6? A. That is right.

Q. Made joints ready to be poured at loops 8 and 9. A. This is loop 8 and this is loop 9 (indicating).

Q. What do you mean by making joints ready to be poured at loops 8 and 9? A. We made the joints up with

magnesia block, got them ready to pour, and put the casing on when the non-Union men left the job. We had
154 them rip the casing off so we would not be responsible for that.

Q. What was placed in place of that? A. You will have to ask Mr. Droba on that.

Q. Do you know? A. No.

Q. Now, at the time that was being done by your men, the water was still in there, wasn't it, and wet all the material from the rains? A. No.

Q. Was it dry? A. Yes; absolutely so.

Q. Now, do you remember telling, Mr. Crockett—you got a letter from Ehret Magnesia Company, dated the 1st of September, 1942, regarding the fact that you had taken over this job? A. Yes, sir.

Q. And put these men on there, non-Union men? A. There is such a letter in the file.

Q. Let me have that, if you will, please?

Mr. Hilland: This is it (handing a paper writing to Mr. Fitzgerald).

By Mr. Fitzgerald:

Q. You and Mr. DuBois and Mr. Droba were discussing the matter of the taking over by you and putting your non-Union men on, didn't they? A. In this particular letter; yes.

Q. I show you a letter of September 1, 1942, and ask you if you received that from the Ehret Magnesia Company (handing a paper writing to the witness)? A. (after examining the document last above referred to)
155 Yes, I received that letter.

Mr. Fitzgerald: I would like to introduce it as Cross-Examination No. 2.

Mr. Hilland: I object to it.

The Court: Mark it and let me see it.

(The document in question described by counsel for the defendant as a letter on the billhead of the defendant company was marked by the reporter "Defendant's Exhibit No. 2 for identification".)

The Court: Very well. Let me see what you have there.
Mr. Hilland: May we approach the Bench?
The Court: Yes.

(Counsel for the respective parties approached the bench and, out of the hearing of the jury, the following occurred.)

Mr. Hilland: I have two objections to it. No. 1, it is an attempt by Ehret, the defendant, to claim that they could by that letter terminate their guarantee and their obligation under the contract. That letter might well lead the jury to believe that by merely writing that letter that they could be relieved of their obligations under the contract and their guarantee on the installation of the underground equipment.

Moreover, it is a self-serving declaration and under this case—that part is checked—the letter is not admissible to prove the facts recited there.

The Court: Let me see that.

Mr. Hilland: Yes, your Honor (handing a book to the Court).

The Court: Of course, that would not admit this letter as proof of the statements in it.

Mr. Hilland: What is that, your Honor?

156 The Court: I would not admit it as proof of the statements in it, of course.

Mr. Hilland: He has offered it generally. He has not specified any purpose.

The Court: I will tell the jury it is not proof of the facts stated in there.

Mr. Fitzgerald: It goes to the weight of the evidence.

The Court: No; it is no evidence at all of the facts stated in there.

It is simply a statement by one of the defendants. It is not proof of it.

This is the part: In view of the action taken by you in placing seven non-Union men on the project to insulate field joints and expansion joints, which work we are supposed to do under our contract with you.

Mr. Hilland: That may be true of the letter.

The Court: I will exclude it if you wish to offer it as proof of any facts stated in there.

Mr. Fitzgerald: Exception.

The Court: You don't need an exception under the new rules.

(Counsel for the respective parties resumed their places at the counsel table and the following occurred within the hearing of the jury:)

By Mr. Fitzgerald:

Q. Now, Mr. Crockett, you had a conference, did you not, with Mr. Droba and Mr. Vandersluis, Mr. Vandersluis being the inspector of the United States Government on the job? A. We had several discussions with Mr. Vandersluis and Mr. Droba.

157 Q. About the question of the water getting in the magnesia while it was exposed in the trenches and before it was sealed? A. No; I had no discussion with him in that regard, not in regard to that.

Q. What conference did you have? What was discussed? A. With Mr. Vandersluis to try to determine what could be done to speed up the progress of the work in order to get heat in the building.

Q. Wasn't there a discussion about this material being submerged in water? A. They had a meeting to determine would could be done in regard to that.

Q. At that meeting who was present? A. Mr. Vandersluis, Mr. Droba, Major Hall, Bill Stecher, my superintendent, Frank Daniels.

Q. Which of these men were the Army or the Government's men? A. Major Hall was.

Q. Major Hall? A. Yes.

Q. He was a United States Major, in the Engineers? A. I might mention Mr. Adkin. He was present.

Q. Who is he? A. The Area Engineer from the United States Engineers Office.

Q. The Area Engineer? A. Area; that is correct.

Q. And the only one present who wasn't connected with the inspector's office of the United States Govern-
158 ment was yourself, and Droba, Droba being with the Ehret Magnesia Company, and your superintendent, and what was his name? A. Frank Daniels, who was laying the pipe and Bill Stecher, my general superintendent on the job.

Q. What was generally discussed with reference to that? A. Mr. Hall asked why we could not progress and give more work and get out of there, and the answer was that the pipe was wet and could not be covered wet.

The question was asked by Captain Hall what could be done to speed up the work, and it was determined that the joints were too wet to cover and something would have to be done to dry these pipe lines out in order that your people, or Ehret, might proceed with the field joints.

Q. Have you finished? A. Yes.

Q. What suggestion was made by whom? A. Mr. Droba suggested that we put heat on the line to try to dry it out in order that he might, that they might proceed with covering and sealing it.

Q. Didn't Mr. Droba suggest that the heat be a minimum amount of heat and it was to try to allow the material to dry by reason of the steam being placed on it? A. No time was specified at all.

Q. No, I mean, it was suggested very limited amount of heat be put on there to dry it out? A. He suggested that we put not over ten pounds on it. That is why we put a safety valve on it so it could not raise over ten pounds steam pressure.

Q. And that was for the purpose of trying to dry
159 out the wet magnesia? A. Correct.

Q. Did that finally dry it out? A. That apparently did dry it to the extent that Mr. Droba decided it was dry enough to cover. That was his own decision. Mr. Droba decided to cover the joints when he decided it was dry enough to do so.

Q. By Mr. Droba, you mean the Ehret Company? A. Mr. Droba was the superintendent for Ehret on the job, I presume.

Q. So when they covered the joints it was apparently dry? A. Mr. Droba determined, Mr. Droba decided to cover them when he had determined that they were dry enough, sufficiently dry to do that.

Q. On this, now, Mr. Crockett, can you locate on the chart from where this particular exhibit No. 27, was taken? A. I cannot.

Q. On the job? A. I cannot.

Q. You can't identify that? A. I can't locate the particular joint from which it came out of.

Q. Can you identify Plaintiff's Exhibit No. 26, as to where that came out? A. I cannot myself.

Q. Did you take that up yourself? A. No, I didn't. The superintendent brought that into the office.

Q. So they were brought in by the superintendent
160 to you and you didn't dig them out yourself at all?
A. I asked him to dig samples out of the line and
he dug them out, and the United States Engineers on the job has a record where it was taken from.

Q. So you don't know where that was taken from? A. No.

Q. Now, will you point out on this joint here—you say there was no, I am speaking about Plaintiff's No. 33, you say that apparently there had been no insulating material or asphalt? A. Apparently not; this was the metal casing.

Q. You knew, as a matter of fact, that as this job progressed they actually did pour the magnesia and the asphalt in there? A. I have seen them in the act of pouring at different times while visiting the job.

Q. And so then it was, as a matter of fact, poured in there by them? A. That is correct.

Q. Can you point out on the chart, showing—is that where that particular section, Plaintiff's Exhibit 33, is (indicating)? A. I designate it as between the pump room and manhole F. That would be in this section of pipe (indicating), from manhole F to the pump room.

Q. Did you see them pour magnesia in there and pour asphalt in there? A. No, I didn't see them pour asphalt in there.

Q. You were not there when it happened? A. No.

161 Q. How about Plaintiff's Exhibit 31? That is, I understand, another picture of 33 but at a different section. You see some light material there (indicating)? A. That is designated between manhole F and the pump room; other than from this manhole and that pump room, I can't.

Q. You didn't see them pour it there? A. No. I wasn't there when this picture was taken.

Q. Were you there when the pouring was done by Ehret? A. Probably I wasn't. I wasn't on the job myself.

Q. So you don't know whether it was actually poured around of your own personal knowledge? A. On investigation when these lines were uncovered.

Q. From your own investigation you don't know whether it was actually poured or not? A. I didn't see them pour it. That would be my answer.

Mr. Fitzgerald: Now, if counsel will please exhibit the letters from the Ehret Magnesia Company in answer to all of your letters set forth in Exhibit 18—that is Exhibit 19.

Mr. Hilland: I will have to see those letters so I can get them.

The Court: How many of these are there?

Mr. Shinn: Nine, I believe, your Honor.

The Court: The jury may be excused until ten o'clock tomorrow morning.

(Thereupon the witness was excused and retired from the witness stand.)

(Thereupon the jury left the court room.)

Mr. Fitzgerald: I would like to introduce these.

Mr. Hilland: I object to them for the same reason.

162 The Court: I will admit the letters but not as proof of the statements contained in them.

Mr. Fitzgerald: There are explanations set forth.

The Court: But they are defendant's claims and they are not admitted as proof of the facts stated in them.

Mr. Hilland: There are a lot of other things that he wrote in them that should never go to the jury. For instance, your Honor, he refers to some letter we didn't offer in evidence. We offered the one of July 31st in evidence but not the other one.

The Court: I would have to see the letters to which these are the answers.

Mr. Hilland: These are the letters (handing various paper writings to the Court). I read that first paragraph to the jury in the letter of July 31st.

(Counsel for the respective parties approached the bench and the following occurred:)

The Court: You can read this in answer to this. This is the first one which was admitted. You can read that.

That is in answer to the first paragraph.

Mr. Hilland: How far does that go?

The Court: Down to here (indicating).

Mr. Hilland: Read the first paragraph?

Mr. Fitzgerald: Yes.

The Court: This is all that was admitted of this.

Mr. Hilland: What is that admitted as?

The Court: As an answer to your letter but not as proof of the facts and neither are these admitted as proof of the facts.

163 Was this offered in evidence?

Mr. Hilland: Yes, sir, but you see this was merely introduced.

The Court: No; I exclude that letter. I am not including all testimony you can offer on some of these questions but I am including those letters.

Mr. Fitzgerald: May I mark that for identification? What is the date of that?

Mr. Hilland: The letter of September 15th.

Mr. Fitzgerald: The letter of September 15th, 1942, from defendant to the plaintiff that is excluded?

The Court: Yes.

Mr. Fitzgerald: And the other is a letter dated August 4, 1942?

The Court: All is excluded except the first two paragraphs.

Mr. Fitzgerald: I think that is all. I will have this ready for tomorrow.

* * * * * * * * * *

165 Q. Now, Mr. Crockett, I present you with something from your counsel's files, a letter dated August 4, 1942, and referring to the first two paragraphs of that letter only, I ask if you can identify that as having——

Mr. Hilland: You do not have to identify it. We admit it.

Mr. Fitzgerald: Mark this Defendant's Exhibit 3.

(Thereupon, the document referred to was marked Defendant's Exhibit No. 3 for identification.)

Mr. Fitzgerald: (Addressing the jury.) Now, ladies and gentlemen of the jury, this letter is dated August 4, 1942, and it refers to the answer of two letters from the Plaintiff to the Defendant, but the August 3rd letter referred to in here was never introduced into evidence, so when you there read August 3rd, have no regard to it at all.

This letter is in reply to Plaintiff's Exhibit No. 19, July letter, 31st, 1942, the first paragraph, in which the Plaintiff states "It is most urgent that you place additional help on the above job in connection with making your joints. This job has been very much delayed already on account of 166 delay in pipe delivery. We are now ready to begin back-filling trenches and the one man you have there cannot keep up with the pipe layers."

Now, this letter of August 4th addressed to Crockett Engineering Company:

"Re-steam distribution of the War College, Washington, D. C.

"Dear Sir:

"We have for attention your letters of July 31st and August 3rd which we will answer by paragraphs."

So you disregard August 3rd, because it has not been introduced in evidence.

(Reading):

"Manpower is hard to procure as this pipe takes sufficient skilled workmen to install installation on underground expansion joints. We now have two men on the job, not one as you stated, and will do our best to obtain additional efficient help to put on this job, but just remember that certain lines were only tested and ready for fill work a few days before our existing field organization was put on the job and then we had to take them off another job because we could not keep them waiting around until your job was tested and ready for them to start.

"If you will tell us where we can get sufficient asbestos workers to increase our field force we will be glad to put them to work on this job.

By Mr. Fitzgerald:

Q. Now, Mr. Crockett, it is not your contention that the damage that was done was due to the lack of delivery of material fast enough? A. Yes. 167

Q. What is it? A. The damage that was done—the question was, was the damage that was done to this line due to the lack of material delivery. Is that correct?

Mr. Fitzgerald: Read the question.

(Question read.)

The Witness: The material was not delivered fast enough to complete the job.

By Mr. Fitzgerald:

Q. Well then, is it your contention that part of the failure was due to that lack of rapidity in delivering material to the job? A. That is correct.

Q. Now, Plaintiff's Exhibit No. 26, which is this piece of asphalt waterproofing, did you find that yourself? A. No, that was turned over to me by my foreman on the job.

Q. And you do not know where it was taken from? A. From what locality, no.

Q. Do you know whether or not it was taken from the locality after the material broke down? A. Yes.

Q. So it was not taken from any of the material before it was taken from the ground? A. No, it was taken after.

168 Q. Now, I will ask you to look at the interior of that and see if there is any mud? A. I don't see any mud there.

Q. What? A. I don't see any mud there.

Q. Is there any dirt in it? A. Yes, there is dust.

Q. And that was presented to you by a gentleman who found it in the condition in which you see it now? A. From the superintendent on the job.

Mr. Fitzgerald: That is Exhibit No. 26.

I think that is all I wish to ask, if Your Honor please.

The Court: Beg your pardon?

Mr. Fitzgerald: I think that is all I wish to ask.

The Court: Very well.

Redirect Examination

By Mr. Hilland:

Q. Just one minute, Mr. Crockett.

Mr. Crockett, yesterday on cross examination you testified according to my notes, that you were not familiar with the Ehret product. Will you explain what you meant to convey by that statement. A. This is the first project or job that we have ever used Ehret material on, therefore I personally had had no previous experience with this type of material.

Q. Now, when you made your original proposal, original bid, for this job, in the material list that you submitted to the Office of U. S. Engineers, did you specify the Ehret system? A. No, I specified Ric-Wil material.

Q. That is spelled R-i-c dash W-i-l. Is that correct?

169 A. Yes, sir.

Q. After you specified Ric-Wil, what transpired then? Will you explain how it occurred that Ehret material was used? A. I was called to the U. S. Engineers' office during a lapse of about five days after the bids went in, and the purpose of that call was to discuss this job with the engineer in charge.

He wanted to know what my experience had been. It seems he was a little bit nervous over on this job, being at the U. S. Army War College. And he though—

Mr. Fitzgerald: I object to what the engineer thought.

The Court: Sustained.

By Mr. Hilland:

Q. Well, as a result of that conversation what if anything was done with respect to the Ric-Wil equipment that you had included in your original material list? A. They were partial to Ehret's material, asked me if I objected to using it—

Q. Not stating the conversation, as a result of that conversation what was done? A. It was changed to Ehret's material. We agreed to use Ehret's material on the job.

The contract was awarded to us.

Q. Well, after it was changed to Ehret equipment did you at any time make a proposal that it be changed again to another kind of underground equipment? A. I did on receipt of a letter from Ehret stating that they could not furnish the steel pipe on priority that was assigned

170 to the job.

Q. And what underground equipment did you recommend at that time? A. I recommended Thermotile, or the material we eventually put in.

Q. You say you eventually put in. Do you mean when they did the work over? A. That is correct.

Q. Now, yesterday you testified that after you got to a point, I believe you said just north of the band-stand, if I remember correctly, you said to a point north of the band-stand, up in here somewhere (indicating) you started to sealing the ends of the pipe covering with roofing cement. Is that correct? A. We did that after it was unloaded from the truck.

Q. And you said you did that at the suggestion of Mr. Droba, the Ehret representative on the job. A. Mr. Droba suggested to my representative on the job that it might be helpful to seal the pipe.

Q. Now, when the Ehret man came in to make the field joints after they saw the pipe work was straight and the field joints had the expansion loops, what if anything did they do with that cement before they made the field joints?

Mr. Fitzgerald: The cement?

Mr. Hilland: Yes, the roofing cement.

The Witness: It had to be cleaned away in order for them to make their joints.

By Mr. Hilland:

171 Q. So that when the joint was made all that roofing cement had been cleared away and was not there? A. Yes.

Q. Now, I neglected to ask you on the questions a little while ago about Ric-Wil, Thermotile and Ehret's equipment.

In the Thermotile job is any of the insulation work done at the factory? A. No.

Q. Now, in the Ehret equipment you pointed out that certain of the covering is done at the factory. Now, is there any trade name they give for that or any particular name they give for that, with respect to that? A. Pre-sealed conduit pipe, they call it.

Q. Pre-sealed conduit pipe. A. That is correct.

Q. Now, yesterday you were asked by Mr. Fitzgerald if you had ever seen the Ehret Magnesium Manufacturing Company's pipe coverers make field joints when the magnesium was wet, and you said no. Is that correct? A. That is correct.

Q. Now, did you after these rains came ever see their pipe coverers making field joints? A. Yes.

Q. Now, at the time you saw them making these field joints did you know whether the magnesium was dry or wet? A. I paid no special attention to that. I left it entirely to Mr. Droba and Mr. VanderSluis and the engineer in charge.

172 Q. Well, when you said no yesterday will you explain what you meant by that? A. I could not stand off on the trench and determine whether or not the joint was wet or dry unless it was examined and tested.

Q. So that when you were asked whether or not you had ever seen them seal these joints when the magnesium was wet, you said no because you did not know—

Mr. Fitzgerald: I object to that.

The Court: I sustain the objection to that.

By Mr. Hilland:

Q. Well then, you did not know whether it was wet or dry? A. That is true.

Q. When you saw them. Did you rely on anyone else for a determination? A. Yes, I relied chiefly on the inspector. He was to determine when the joints were dry enough to be covered.

Q. Who was that? A. Mr. VanderSluis.

Q. And who else did you rely on? A. Levan was inspector under Mr. VanderSluis. I also relied on Mr. Droba who was superintendent on the job.

Q. Now, yesterday you also testified that in making these tests to determine whether or not the welded joints were tight you used a water test. A. I was very much confused on that. I am sorry. We used a water test throughout the job by filling the pipes and putting a force pump on it and pumping it up to the desired pressure.

173 Q. Now, after the job was completed what kind of test was put on? A. We put the steam pressure on from the boiler house.

Q. Now, when you made that water test were any of the welded joints at any time found defective? A. No.

Q. Were they always found tight? A. Yes, sir.

Q. I say were they always found tight? A. In one or two cases we found that the joints sweat just a little bit, and we had to call the welder back to reweld in a couple of places.

Q. When you say they sweat the least bit, will you explain that? A. I mean a drop of water would appear on the joint.

Q. Would water run out of the pipe? A. No. Those joints were immediately corrected and rewelded.

Q. And after all this insulation covering and waterproofing was removed from the underground pipe at the time you did the work over, were any of those welded joints found defective? A. Not any at all. They were all tight.

Q. At the time you placed asbestos workers on the job—I believe you testified September 1st that they were placed on, and removed September 4th at noon—now, at the time you placed them on that job did Ehret Magnesium Manufacturing Company have any men on the job making field joints at that time? A. Yes, they had men making joints when we put men on.

174 Mr. Fitzgerald: I didn't get that last.

The Witness: Ehret's men were working when we put men on the job.

Mr. Hilland: That is all.

Mr. Fitzgerald: One or two questions I would like to ask.

Recross Examination

By Mr. Fitzgerald:

Q. Do I understand you to say Ehret's men were working on the job when you put your men on the job? A. They were making field joints when we put men on the job, that is correct.

Q. Now, were Ehret's men also working on the job when your men were working on the job? A. They worked for about two hours on the morning when I put men on the job and finally left, all except one. One of the men remained on the job with us.

Q. And did he do any work on that job? A. Yes.

Q. Who was that man? A. The man who poured your field joints, poured the waterproofing on the joint; continued to work with us, stayed on the job pouring joints with us.

Q. Was he your employee? A. He was carried on our payroll while he worked there.

Q. So he was paid by you directly as your employee? A. That is right.

Q. And not as employee of the Ehret. A. The
175 three days he worked for us he was, yes, I paid that
man.

Q. Now, Mr. Crockett, how many feet was this whole job, whole area? (Indicating on blackboard.) A. Approximately 4800 feet, I think. The figures were definitely given on the plan. We could take an adding machine and find them.

Q. So the failure occurred only in this particular area? (Indicating.) A. No, not in that particular area. The failure occurred in the whole job.

Q. Did any failure occur down here. A. Yes.

Q. You say the material failed in other portions, other than between the boiler house and down at this end here? (Indicating.) A. On examination we found material defective throughout the job.

Q. Now, will you point out other portions where it failed? A. Throughout the entire job.

Q. Throughout the entire job? A. Yes, sir.

Q. Now, what portion of that were you required to replace by the Government? A. From the pump room and boiler room.

Q. From here to there (indicating)? A. No, sir. From the pump room.

Q. Where is the pump room? A. (Indicating on blackboard.) Here.

176 It goes up— A. Here (indicating).

Q. Now, what was done with respect to other portions? A. There wasn't anything done by us with the rest of the job.

Q. Who repaired the other repair? A. Well, they hired my superintendent to come down and make repairs on one section. Whether or not they went any further than that I don't know.

Q. Who hired your superintendent? A. The U. S. Engineers.

Q. But Ehret had nothing to do with that? A. Ehret had nothing to do with that, I don't suppose.

Q. Now, you haven't been charged of course with any of the other failure? A. On the final analysis my agreement with the U. S. Engineers Office was to replace a certain number of feet of pipe.

Q. But you were not charged with the place that was repaired by the U. S. Engineers? A. No.

Q. You were not charged by the United States Government? A. No, I was not charged by the Government for what we didn't put in.

Q. I see. Now, when you speak of the pre-sealed conduit pipe, before this job was started by you and before the contract was entered into between you and the Defendant Ehret, you had examined some of the material? A. Just a sample, about what you have there, which was a

177 sample left at the U. S. Engineers' office, not my office.

Q. Then you understood that the pre-sealed pipe coming from the factory of the Defendant was not sealed in the front in the fashion— A. I assumed that it would be. It was designated as pre-sealed conduit pipe.

Q. Weren't you told that the pre-sealed pipe came in 20 foot lengths? A. That is correct.

Q. And that the steel pipe would go through the magnesium? A. That is right.

Q. And then project out on each side? A. That's right.

Q. To the extent of about eight inches. A. Correct.

Q. So that you could weld it together? A. Right.

Q. Then you understood that when that was delivered to you that was not all also sealed up in the same fashion— A. I did not understand it at all. It was believed that the pipe would come pre-sealed to the job and the ends would have been sealed over to protect them from moisture.

Q. Well, how did you expect— A. Why did they designate it as pre-sealed pipe?

Q. You saw it on the job. Did you call to our attention that the ends were open? A. Not after it came to the job I did not.

178 Q. Sir? A. Not after it arrived at the job.

Q. Why didn't you complain? A. Because the Engineers' office had approved it that way.

Q. Did you have in mind at that time that the material that was delivered on the job would be sealed up completely to? A. I had no more intention of it being—after the first load was delivered to the job I could readily see the condition in which it was sent here.

Q. You made no complaint about that? A. I made no complaint about that.

Q. And you were willing and were accepting the material load after load as it was delivered? A. We were accepting the material as it was delivered on the job by Ehret.

Q. And you accepted the material delivered by Ehret in the fashion in which it was delivered by them?

The Court: It does not seem to me that this is proper recross examination.

Mr. Fitzgerald: I think that is all.

Mr. Hilland: If Your Honor please, he has opened up one matter I would like to pursue.

The Court: Very well.

Redirect Examination

By Mr. Hilland:

Q. Mr. Crockett, you testified on recross examination that the whole job was found defective. Is that correct?

A. On examination we found the whole job to be
179 defective.

Q. Now, you say examination. Now, what examination was made—you testified that the job was done over from this building up here (indicating) clear back to the boiler room. A. That's right.

Q. Now, what examination of the pipe was made from this point (indicating) over to the end of the line, and from this building, (indicating) or here (indicating) through the rest of the line down in here? A. The pipe was uncovered at intervals of 200 feet and examined by me and my superintendent.

Q. And at the intervals of 200 feet, what did you do at those intervals of 200 feet? A. We uncovered the pipe so we could determine whether the waterproofing had receded or left the pipe.

Q. And those tests disclosed that it had? A. Those tests were not as bad in those sections as what we replaced but still it was defective.

Q. Now, I believe you also testified that your superintendent had done certain work for the Office of U. S. Engineers on the rest of the line? A. That's right.

Q. Now, what was his name? A. Frank Daniels.

Q. Where is he employed now? A. Employed by the U. S.—employed by the War College—employed at the War College working as a utility man.

180 Q. At the site of this same job? A. At the site.

Q. Now, will you explain how it occurred that you were required to correct only a part of the defects that were discovered? A. We were called in to—by the U. S. Engineers' office to make some suggestion as to what we intended to do to correct the trouble on this job. We first were instructed by them to contact the manufacturer of course, which naturally we did.

And after getting no results from that source they said "Well, you will definitely have to come in or we will take over and do it and your bonding company will settle."

So we went back and tried to pin them down. Their order was to go back and try to correct defective materials on the job, but we could not get from them just what part of this job was to be replaced.

So before we would go back I definitely had a conference with them over there and made them point out to me just what part of this line they considered defective, and they definitely pointed out—I show you—

(Witness goes to the blackboard and indicates.)

—their decision was that we begin at Manhole A and go to the pump room and replace the steam line with Thermotile, and we were to uncover the line from manhole (indicating) to the boiler room, and if that was defective, that was also to be replaced; and upon completion of that work the agreement was we were to be paid the final payment and the job would be one hundred percent.

Q. And did you obtain any release of any kind from the U. S. Engineers after that? A. Yes, I was released by the U. S. Engineers. Final payment was made and they accepted it. 181

Q. Then for doing that job you were released from doing the rest of that. Is that right? A. That's right.

Mr. Hilland: That is all.

Recross Examination

By Mr. Fitzgerald:

Q. Do you know Mr. John Hartley? A. I have seen him on that job.

Q. What was his position? A. He was a pipecutter on that job.

Q. Is that Mr. John Hartley (indicating)? A. Yes.

Mr. Fitzgerald: That is all.

Mr. Hilland: That is all from Mr. Crockett.

* * * * * * * * *

Thereupon, **William F. Suter** was called as a witness for and on behalf of the Plaintiff herein, and being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:

Direct Examination

By Mr. Hilland:

Q. Will you please state your full name. A. William F. Suter.

182 Q. What is your occupation? A. Inspector.

Q. Inspector where? A. The U. S. Engineers.

Q. Where are you so employed at the present time for them? A. I am resident engineer inspector for Waynesboro, Pennsylvania, vicinity.

Q. In 1942 where were you an inspector in that Office? A. 1942?

Q.Yes. A. Why, from March 1942 to August 1942 I was stationed at War College in Washington.

Q. Now, were you at that time inspector on the job, underground steam distribution system being installed there by the Crockett Engineering Company? A. I was.

Q. Do you remember when the first load of pipe was delivered on that job? A. I remember when it was delivered. I don't recall any dates.

Q. Did you inspect the first load that was delivered? A. I did.

Q. Will you describe the condition in which you found that pipe—or the covering on that pipe. A. Well, the covering on that pipe, which we term the fiber cover, that is, the outside of the pipe, was damaged, off, and I questioned the pipe when it came in.

Q. And then what occurred? A. Well, as far as I was concerned I rejected the pipe, but it went over my head then and was installed. 183

Q. Will you take this exhibit here—I think it is Exhibit No. 25—if you will take this and show the jury, point out to the jury the condition you found that covering in when it came.

Mr. Fitzgerald: You don't mean that particular—

By Mr. Hilland:

Q. No, the covering on the pipe that you inspected, the first load that was delivered. A. (Indicating) Well, this is the outside fiber cover that is supposed to hold the insulation along around the pipe.

When the first load of it came in this outer casing here was off. I also noticed that—this insulation is pitch—was all smashed down and it was irregular; in some spots there were voids in there of maybe three inches in diameter that there wasn't any pitch.

That is about all from my inspection.

Q. Now, can you illustrate on this (indicating) with respect to the thickness on this particular pitch or waterproof? You call it pitch. Can you illustrate from that exhibit? A. Well, here is a way to exhibit of it right here, sir (indicating).

Q. Will you explain what you mean by that? A. See here, the pitch, the protector of the magnesium here, is not the diameter that it is up here (indicating), it is irregular, round.

Now, here (indicating) you see it is maybe one-half inch where up here (indicating) you have an inch or better.

184 Q. Did you find that on any substantial quantity of the pipe that was delivered in that first delivery? A. Well, I wouldn't like to say that, although there was a couple of loads of it that came in. I just don't recall any more how much of it.

Q. Well, when you rejected it did you reject all or part of those first two loads? A. All of it.

Mr. Hilland: That is all—excuse me. Keep your seat.

By Mr. Hilland:

Q. How long did you continue on that job as inspector? A. Well, I was there toward the start of the job until the latter part of July. I was assigned to another—

Q. Now, up to the time you left there in July were there any asbestos coverers or workers on the job for the Ehret Magnesium Manufacturing Company making field joints?

A. Well, I was continuously after Mr. Crockett and Crockett Engineering Company to get the joints covered on that pipe, and I believe that about two days before I left there was coverers on the job but they wasn't working.

Q. And they were not? A. They was not working, as far as I recall.

Q. So that up to the time you left there they had not started making any field joints? A. Not as I recall they hadn't.

Mr. Hilland: Your witness.

Cross Examination

By Mr. Fitzgerald:

Q. Would you give me the date again when you left? I didn't quite get it on direct examination. A. If I had the records here I could tell you. It was in the latter part of July. 185

Q. That you left? A. Yes. Because I was assigned a new job on August 3rd.

Q. You say there were some of the men of the Ehret people there, the asbestos workers or magnesium workers. How many were there, do you know that? A. I don't recall that.

Q. Were there two or three or four or five? A. I wouldn't like to say.

Q. I mean on the job that were not working. A. There was no joints covered at the time I left.

Q. Do you know why the joints were not covered? A. I don't know that.

Q. Do you know the joints were all wet as the result of rain? A. They were wet. Because I was continually after Crockett Engineering to get those joints covered.

Q. You wanted Crockett Engineering to cover the joints? A. That's right.

Q. Why did you want them to cover the joints? A. Because I knew if water was to get in there—and I may state at this time also—due to water some of those joints around the joints, the insulation around the joints, was breaking up.

Q. You saw them breaking up? A. I saw it, yes, sir.

186 Q. Now, do you recall at any time the Ehret people had been after Mr. Crockett to protect that material from lying in the water? A. I don't recall that.

Q. But you were after him all the time, weren't you? A. I was.

Q. And what did he do to correct that condition on the water getting into the magnesium, if anything?

Mr. Hilland: If Your Honor please, I assume that goes in subject to the same objection I made yesterday.

He is inquiring now as to what if anything Crockett Engineering Company did to protect the ends of these coverings before the field joints were made. Of course we contend that that was their—

The Court: (Interposing) It is put in on the same condition.

Mr. Fitzgerald: Read the question.

(Question read.)

By Mr. Fitzgerald:

Q. I am speaking of the Crockett. A. I will have to think back. It has been a couple of years since I was down there.

Q. Take your time. Take your time. A. Truthfully, I cannot say that there was anything done. That has been a couple of years.

Q. It is your recollection then that as far as you are concerned nothing was done during the time that you were there by Crockett, the Plaintiff, to protect that magnesium from getting wet. A. I would say there wasn't.

187 Q. What? A. I would say there wasn't.

Q. Now, you say you had objected to or rejected certain material that was delivered in the first two loads. A. That is right, sir.

Q. And you cannot tell, correctly recall right now, how many of the 20 foot lengths of pipe that were delivered there that you objected to? A. I cannot recall just how many.

Q. Do you know approximately how many 20 foot lengths were delivered in each load that was delivered? A. Why, 20 foot lengths, I don't know. Whatever lengths was delivered. Sometimes they would bring different lengths, and some loads they would bring the loops.

Q. No, I am speaking of the first two deliveries. A. I don't recall just how much was on those loads. You see, we didn't check material—I mean we didn't check the quantity, we just checked the material.

Q. Well, did you go through all the 20 foot lengths as they were deposited on the ground? A. I would say the first two loads I saw every piece taken off.

Q. Did you find in most all of them that the fabric was torn off to some degree? A. Yes, most of the first couple of loads.

Q. And that the exposure here—you said the pitch had broken down. A. That's right.

Q. And then—you reported that of course to your
188 high man? A. That's right.

Q. And then did he make inspection of that material too or have inspection made? A. He must have made inspection of it because it was passed over my head.

Q. And it was finally placed? A. Placed in the ditch, yes, sir.

Q. You don't know who the men were that approved the material? A. I wouldn't like to say.

Mr. Fitzgerald: That is all.

Redirect Examination

By Mr. Hilland:

Q. Just a minute, Mr. Suter. On cross examination you said that you could not remember anything that Crockett Engineering Company did to protect the magnesium at the ends where it was exposed. What if anything did the Defendant Ehret Manufacturing Company do to protect those ends? A. Nothing, sir.

Q. That is all—one more question. Had any rains come before you were removed as the inspector down there? A. Yes, sir.

Q. How heavy were those rains? A. I recall a couple of rains there where the ditches were filled with water.

Mr. Hilland: That is all.

Recross Examination

By Mr. Fitzgerald:

189 Q. The material was lying submerged in the water? A. Yes, sir.

Mr. Fitzgerald: That is all.

* * * * * * * * *

190 Thereupon, **Frank Charles Daniels** was called as a witness for and on behalf of the Plaintiff herein, and being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:

Direct Examination

By Mr. Hilland:

Q. Will you please state your full name. A. Frank Charles Daniels.

Q. Where do you live? A. 19 Chillum Road, Chillum, Maryland.

Q. How long have you lived in the vicinity of Washington? A. All my life.

Q. What is your occupation? A. Plumber and steamfitter.

Q. How long have you been engaged as a plumber and steamfitter? A. Approximately 17 years.

Q. Where are you employed at the present time? A. The Army War College.

Q. In what capacity? A. As a plumber and steamfitter.

Q. How long have you been so employed there? A. Nine months.

Q. Prior to your employment with the U. S. Engineers Office—are you employed by the U. S. Engineers

191 Office? A. Post Engineers.

Q. Post Engineers. Prior to your employment there where were you employed? A. Crockett Engineering.

Q. In what capacity? A. As a steamfitter.

Q. For how long were you employed by Crockett Engineering Company? A. I was there approximately one and one-half or two years.

Q. Did you do any work on the underground steam distribution system installed by Crockett Engineering Company at the Army War College in 1942? A. I did.

Q. When did you commence work on that job? A. I went down there approximately the second week of May.

Q. And what kind of work did you start doing at that time? A. We started laying off, running a steam line through, laying off the ditches, which way we was going.

Q. All right. Then what did you do after you laid off? A. Well, we started digging ditches to lay the pipe down.

Q. Do you remember when you started excavating ditches? A. I was there approximately two to three weeks after I got on the job.

Q. You got on the job I believe you said in the second week of May. A. That would throw me some where

192 around the first of June.

Q. How many lineal feet of ditch had you dug before the first load of pipe arrived on the job? A. I will say approximately from 350 to 500 feet.

Q. Were you still in the process of digging ditches or did you suspend the digging of ditches awaiting pipe before the first delivery? A. We kept on. I was of the understanding that we were going to get the pipe to complete the whole job, so I kept on digging.

Q. And after the pipe arrived on the job what did you do with it on behalf of Crockett Engineering Company? A. For instance?

Q. What did you do with it? What was the first operation after the pipe came there? What was the first thing done there? A. Well, the pipe they shipped on the job, the first load was not the load that we wanted. The first load that came on the job if I remember right was four inch.

Q. And the size of the pipe you should have received was? A. I should have received the eight.

Q. The eight inch pipe? A. That's right.

Q. How long after the first load of four inch pipe arrived did the next delivery arrive, do you remember? A. I will say approximately from a week and a half to two weeks, if not longer.

Q. Were you able to lay any pipe until the second delivery of pipe came? A. I shouldn't have but I did,
193 just a little bit of it.

Q. Now, after you got the pipe laid in the ditch what was the first thing you did with it? A. The first thing?

Q. Yes. A. You mean after I got a manhole?

Q. No. You laid it in the ditch. It came what length? A. Anywhere from 18 to 23 foot length.

Q. What did you do with those lengths of pipe? A. We welded them and tested them and then they was ready for the pipe coverers.

Q. Do you remember what section of the pipe was laid, welded and tested by you first? A. Yes, it was from the boiler room to what they call Manhole "X."

Q. Now, how long after you finished laying, welding and testing that pipe did Ehret Magnesia Manufacturing Company place pipe coverers on the job to make the field joints? A. I say after I turned that line through it was a week to two weeks before they started on it.

Q. All right. Now, how many pipe coverers did they place on the job when they did place workers there at all? A. They had one pipe coverer and one helper.

Q. Now, do you remember the day before he arrived on that job? A. Do I remember the day before he arrived on the job?

Q. Yes. Did you meet him before he arrived on the job for work? A. Yes.

194 Mr. Fitzgerald: Who are you speaking of?

Mr. Hilland: The pipe coverer.

The Witness: Yes. I met him one evening. I was there approximately from one to two-thirty.

By Mr. Hilland:

Q. And when was that with relation to the first day he came to work? A. What do you mean?

Q. When was it—was he working at the time you met him? A. No, sir.

Q. When did he come to work after you met him? A. I think he came to work the next morning at 7:30.

Q. All right. Now, were you introduced to him on this afternoon that you talked about? A. Yes, sir.

Q. Who introduced him to you? A. Mr. Droba.

Q. And do you remember that pipe coverer's name? A. Yes.

Q. What was it? A. John Hartley.

Q. Now, after you had been introduced to Mr. Hartley by Mr. Droba did you have a conversation with Mr. Droba? A. Yes. We talked a little bit.

Q. All right. What was the conversation you had with Mr. Droba? A. Well, the best of my remembrance, the elbows was there. We talked about those.

195 Q. Excuse me, Mr. Daniels, if you will keep your hand from your mouth— A. We talked about the elbows that came on the job. They are different type and he had a plan that went with them. We had those located way back in the boiler room, so I took him up there, and John Hartley, Mr. Droba and myself went there, and he checked all over them and was taking measurements on them to see that they worked out right according to his plan.

So I think that John at the time went down to start the same field joints, to get his magnesia ready, and Mr. Droba was there and I ask him where was Tom. Tom is the factory man I worked with before I went to work with Crockett

Engineering. He said "Well, he is on another job, but you will find this one all right." And if I am right, I understood him to say this was his first job of this underground tunnel work.

Q. Who said that to you? A. Mr. Droba.

Q. That it was whose first job? A. John Hartley's.

Q. Now, did you observe John Hartley the first time he came—the first morning he worked there? A. Yes.

Q. Will you explain what if anything you did that morning when he was working? A. Yes. I helped him to get the ells out, and we figured on kind of giving him a hand putting the elbows on. John, it didn't seem to me, the way he was working, that he had been on that job any length of time, or, it was his first job.

196 Mr. Fitzgerald: Your Honor, I object to his saying "It seems to me."

The Court: Yes. I sustain the objection.

By Mr. Hilland:

Q. Now, Mr. Daniels, when John Hartley started to work there did he have a helper? A. No, I think the helper came in on the second or third day after John got there.

Q. How long did John Hartley work there as a pipe coverer before he got any help from other pipe coverers? A. Well, at the time the job was going on it seemed an awful long time.

Q. Did he keep up the fieldjoints with the progress of your work of laying, welding and testing the pipe? A. No, sir.

Q. How long behind did he run? A. Well, sometimes I would say I was approximately 500 to 800 feet ahead of him.

Q. And these fieldjoints on the straightaway came how often in the trench? A. I would say approximately 20 feet.

Q. And at each loop how many fieldjoints are there? A. Well, at the loops there are four main elbows on it.

Q. And he ran from 500 to 800 feet behind you? A. That is, when we got going good.

Q. Now, did there come a time when there were rains while that job was in progress? A. Yes, sir.

197 Q. Can you remember about what time those rains came? A. About the whole month of August I would say.

Q. And how far behind the progress of your work was the progress of making the fieldjoints by the Ehret Magnesia Manufacturing Company? A. Well, I say possibly around 600 feet or more.

Q. Now, how heavy were those rains that came at that time? A. How heavy?

Q. Yes. A. I think it was about one of the heaviest rains we had for a while.

Q. How high did the water get in the ditches? A. Well, it came over the top of the ditches.

Q. Now, after those rains came do you remember what if anything was done about it with respect to pipe covering that was in the ditch and had gotten wet? A. Well, we set up a temporary boiler there to dry it out, if that is what you mean.

Q. Yes. Do you remember about when that was done? A. It was done I say some time in August.

Q. And do you remember how long the steam pressure—first of all how much steam pressure was put on that pipe at that time? A. Well, we had a 10-horse boiler there and you would have been lucky if you could have got over five pounds out of it.

Q. What? A. You would have been lucky if you could have gotten over five pounds out of it.

198 Q. And how many hours a day was that steam kept up? A. From 18 to 24 hours.

Q. For how long a period of time? A. Until the line was dried out, until they was satisfied on it.

Q. Until who was satisfied? A. Mr. Droba.

Q. After that was done did he put asbestos workers on the job? A. He put one or two more on, to the best of my remembrance.

Q. Mr. Daniels, will you please keep your hand down so the jury can hear you. It doesn't make any difference what I hear, it is what they hear. A. All right.

Q. And do you remember when they started covering again after that drying out process? A. Remember when it started?

Q. Yes. A. On which line?

Q. What? On which—I don't—

Q. Do you remember how soon after you put steam on the line that they started to make fieldjoints again? A. After the joints were all dry? Is that what you mean?

Q. Yes. A. I think they started the next day with one or two men.

199 Q. But how long from the time you put steam on until Mr. Droba decided the line was dry, how long was that time? A. I would say approximately ten days to two weeks.

Q. When they put pipe coverers on the job to make the fieldjoints at that time were they asbestos workers or what kind of workers were they? A. Well, as far as I know there was one asbestos worker and the rest were plasterers.

Q. If you will come down.

(The witness stepped to the chart board.)

When these heavy rains came, if you will take this printer—the boiler house first. A. All right.

Q. If you will stand back too so His Honor can see the map—how far had you gotten with the laying, welding and testing of the pipe at the time the heavy rains came? A. From—(indicating)

Q. What is that—can you describe that by a loop or manhole or something like that? A. Yes, that is a manhole (indicating). That must be Manhole F.

Q. What? A. Manhole F.

Q. Manhole F. Now, what manhole is right at this point (indicating)? A. That is G.

Q. This shows F here (indicating). That shows Manhole E there (indicating)? A. That's right. Manhole E and Manhole F.

200 Q. All right. You had gotten to Manhole E then? A. Yes.

Q. At the time these heavy rains came. Now, do you remember the condition—this being Manhole F here—(indicating)—do you remember the weather conditions at the time the pipe was laid, welded, tested and covered from Manhole F to this building here (indicating)—what is this called? The power house I mean. A. The T-4 building.

Q. That is the Officers' Mess, isn't it? A. Yes.

Q. What were the weather conditions? A. They were fairly good conditions and we had no rain whatsoever.

Q. You had no rain whatsoever. From the time the pipe was delivered to the job for that section, laid, welded, tested and covered—by what coverers were those fieldjoints made from that particular Manhole F down to the Officers' Mess? A. Well, it was Mr. Hartley for one, and Eddie Krege was his helper.

Q. And they were whose employees? A. Ehret Magnesia Company.

Q. Now, from the time that pipe was laid, welded, tested and covered by those workers, had it been subject to any rain? A. No, sir.

Q. Now, were you present—now, sticking to that part of the pipe line from Manhole F down to the Officers' Mess house, were you present when that section of the
201 pipe line was uncovered? A. Yes, sir.

Q. Will you tell the jury the kind of conditions found there with respect to that covering?

The Court: I think he might take his seat.

Mr. Hilland: Yes, if he will.

(The witness resumed the witness chair.)

The Witness: Well, when we were down to put Thermotile in we dug out that section from that section to T-4. That line was worse off than what they claim got wet from the rains.

Q. Well, will you describe the condition of that pipe? A. Well, the tar had left the top and run on down in the bottom and she run along the pipe and magnesia casing down into a loop we had there, and when we opened that loop that was a six-inch pipe that acted as expansion for four-inch pipe, and there was over two-thirds of the six-inch pipe filled with tar.

Q. Was any tar supposed to be in that chamber at all? A. No.

Q. What other conditions did you find with respect to the pipe covering in that section? A. Well, on the field joints when we tore those open, I was examining everything on the job—where they met the field joints the joints the joints wasn't made exactly tight. They had a crack anywhere from one-sixteenth to one-eighth of an inch in each one of them where they took a little ground asbestos and rolled it over to make it tight.

Q. Now, what other conditions did you find in the
202 pipe along that section? A. I don't get what you
mean.

Q. Did you find any other defects in it? A. Not right—not to the best of my knowledge unless you recall something.

Q. Have you seen this piece of covering before (indicating)? A. That looks like the piece of covering I cut off down at Army War College.

Q. And will you tell the jury whether or not that piece had ever been in the trench? A. No, sir. It hasn't.

Q. Where was the pipe when that piece was re-
203 moved? A. Well, that piece of pipe is for six-inch
line and that came out when I made the connection
at Manhole K.

Q. And where is Manhole K, on the map up there, or on the plan? A. (Witness goes to chart-board and indicates).

Q. At that point. Thank you. Now, I call your attention to this, if you will step down here.

(Witness steps to material exhibits or specimens).

I call your attention to the difference in the thickness of the waterproofing at this point and other points around the covering. (Indicating). Was that in that condition at the time you cut it off? A. It was.

Q. At that time—or during the progress of that job, did you find any other pipe covering with the waterproofing in that or similar condition? A. Yes.

Q. Did you find any substantial quantity of it in that condition? A. Practically the whole job was that way.

Q. All right. If you will take your seat again now, please. (Witness resumes the witness chair).

Mr. Daniels, did you make any test holes in that line for Mr. Crockett when the defects in the line were first observed? A. Yes, sir.

Q. And where did those test holes begin? A. We started from T-4.

204 Q. Where is T-4? A. T-4 is the building we was just showing on the map.

Q. That Officers' Mess? A. That's right.

Q. And from that point where did you go? A. What do you mean, on the first time?

Q. Yes. A. From there approximately to Manhole A.

Q. Approximately to Manhole A. Now, later on did you make other test holes? A. Yes, sir.

Q. And where were they made? A. Over the whole place.

Q. Now, were there any places where test holes were—well, will you describe the conditions you found in the test holes or in the whole line. A. The whole line. Well, the first time I turned steam on I thought I was in Yellowstone Park.

Mr. Fitzgerald: Your Honor, I object.

The Court: Just let him answer the question.

Mr. Hilland: I agree with you.

By Mr. Hilland:

Q. All right? A. I started off at the band-stand. When we turned the steam on it just cracked the valve; it took me about one and a half to two hours to turn the steam down. As we got down to Loop 7 a gusher came up, approximately 40 feet in the air.

As we got the steam to T-5 and T-4 buildings we seen steam coming up I would say ten places.

* * * * * * * * *

206 Q. Mr. Daniels, were you working for the Crockett Engineering Company at the time this job from the Officers' Mess back to the boiler room was corrected? A. Yes, sir.

Q. Will you tell the court and jury what had to be done in that connection, the whole operation. A. The whole operation?

Q. Yes. A. When we first went in we unexcavated all of
that—well, from the time we started we was going to
207 put more tar, and we dug to G, and I think I ordered
20 barrels of high melting point, and we built forms
to put tar on the top of it, try to give it insulation so the
water wouldn't come in.

I wasn't satisfied with it and I persuaded Mr. Crockett to put steam pressure on it to see whether it would hold up or not.

In the meantime we had kept a gang working who got pretty close to Manhole D on that, that is, from F; and then they turned north and went to D.

Finally we put the steam pressure on and it came on out. So that was that. Then we decided to go ahead, and we had Thermotile men there and we decided to put Thermotile in.

We back-filled it; everybody thought it would work; so we went ahead and dug that out and put Thermotile in.

Q. Before you put Thermotile in what did you have to do besides excavating the whole line? A. We had to take hammers, chisels, hatchets, axes, crow-bars, everything, to pry that stuff off. And the tar had melted and got between the pipe and the magnesia, what was on there; and that warm weather made it kind of gooey. We had a time to get it off. We had to scrape the pipe clean to get that other pipe covering on.

Q. Now, since that corrective work was done have any defects at all appeared in the line from the boiler room to the end of the line where you did corrective work? A. Not as today.

Q. What? A. Not as today.

208 Q. Did Mr. Droba or any other representative of the defendant company ever made any suggestions or give you any directions with respect to protecting the ends of this magnesia? A. Well, at one time we talked about it, after we got down to the other side of Manhole F, the other side of Expansion Loop Number 7.

Q. Where is that with respect to the bandstand? A. That is at the bandstand.

Q. And then what suggestion did he make? A. Well, we came to the conclusion we would use this common old roofing cement, see if that wouldn't help to keep the water out of it.

Q. Was that successful? A. No, sir.

Q. What happened to the roofing cement when it was applied? A. Well, it wouldn't stick firmly to the magnesia. You could go away and half an hour later she would leave a crack around the magnesia and the pipe.

Q. Did Mr. Droba make any other suggestions? A. Not to my knowledge.

Q. Did he ever make any complaint that you had failed to protect the ends of the magnesia? A. Yes.

Q. What? A. Yes.

Q. When? A. During the whole time from the time the stuff got on not to let the magnesia get wet. Lord only knows how you are going to stop it from getting wet.

209 Q. Did he ever do anything to protect it? A. Not as I know of.

Q. Did any of his workers ever do anything to protect it? A. No, sir.

Mr. Hilland: Your witness.

Cross-Examination

By Mr. Fitzgerald:

Q. Mr. Daniels, you were the superintendent on the job, weren't you? A. That's right.

Q. Of this Crockett Engineering Company. And I understood you to say that the first load that was delivered was four-inch pipe. A. That's right.

Q. Instead of eight-inch pipe. A. That's right.

Q. Now, you were working on eight-inch pipe, weren't you, instead of four-inch? A. We didn't have any eight to work.

Q. Did you have any four-inch pipe on this job at all? A. Yes.

Q. Was the four-inch pipe the first that was delivered on the job? A. That's right.

Q. Were they condemned by the inspector? A. The first load that came in, after they got it unloaded—the inspector was Buck Suter—myself—he said he didn't like the looks
of it, told me not to use it until I heard from him.
210 He went and got Mr. Vandersluser. Mr. Vander-
sluser said he didn't like the looks of it. I think he
went and called Mr. Droba or Mr. Droba was there at the time and he said "Well, I am going to call the office to find out if it was all right to use it."

He was gone about 15 minutes, came back and said it was all right.

Q. And did the inspector pass it then? A. Yes.

Q. And it was put into the ground. Now, you say that you met Mr. Hartley on a certain day and that the next day he came on the job. A. That's right.

Q. Who was with him on that job then? A. Who was with him?

Q. Yes. Who was with Mr. Hartley? A. The first day he came on the job?

Q. Yes. A. Mr. Droba and I think it was Mr. DuBois.

Q. This gentleman here (indicating), Mr. DuBois, who was Vice-president of the Ehret Company. Is that right? A. That's right.

Q. Now, were there any other workers there, mechanics? A. No, sir.

Q. Now, then, when he arrived was there any material placed in the ground by you, by the Crockett people? You? A. That's right.

Q. Now, what material had you put in? A. What material had we put in?

211 Q. Yes. A. Well, the line from the boiler room to what they call Manhole X now.

Q. Where is Manhole X? A. That is right on the map now.

Q. Where would it be? A. It would be right in front of 55-B.

Q. Where is that? A. Right here. (Indicating).

Q. Then you had laid how much material? A. From here to here was all laid and inspected and we was approximately around here. (Indicating).

Q. How many feet would that be? A. From here?

Q. From where- A. I will say approximately 350 to 500 feet.

Q. And then after Mr. Hartley got on the job did he work there himself? A. Yes.

Q. Alone? A. He worked there two or three days alone.

Q. How much of that work did he seal? A. How much of it?

Q. Yes. A. Well, it was so little I couldn't tell you.

Q. About how many joints? A. Well, take for instance, he started on Number 2 Loop; he was four days covering that, and he didn't get it poured then and we had to tear it out.

212 Q. I am speaking of the time he got on the job until your 300 feet there as I understand— A. Yes.

Q. —had been laid by you and the field joints were in place for the wrapping by the Ehret people. A. Well, that section through there didn't get completely covered until the last of August if I remember right. Completely.

Q. He didn't completely cover that until the last of August. A. Then we did that. We finished it ourselves.

Q. Why didn't he cover it? A. Why didn't he?

Q. Why didn't he cover it? A. All right. On Number 2 loop he poured that, if you remember right, he started to pour it one evening about 1:30. Between 2 and 3 o'clock he ran out of kerosene; he went home, forgot about the job. That evening we had a rain. The next morning he couldn't pour it. You wouldn't let him pour it, said it was wet. Well, that joint didn't get finished until the dispute about the other pipe. And we was down to Number 10 at the time.

Q. And the reason he didn't cover that was because the rains had come and he couldn't pour it. A. Through his fault.

Mr. Fitzgerald: I move that be stricken out.

The Court: Yes.

By Mr. Fitzgerald:

Q. Will you answer the question now?

213 The Court: Read the question.

(The question was read).

By Mr. Fitzgerald:

Q. Because it was wet. A. That's right.

Q. How long did that remain wet before he started his work again? A. How long did it remain wet?

Q. Yes. A. I couldn't tell you definitely.

Q. But the reason why he didn't go back there to pour the material in the joints was because it was wet and he wouldn't do it? A. Because it was just damp.

Q. And he said he wouldn't pour any of those joints when they appeared to be wet? A. That's right.

Q. That is correct. Now, about how many feet of that job was submerged under water— A. I will say from Manhole A—

Q. Would you point that out on the joint, please. A. (Witness steps to map). Manhole A to the other side of the bandstand approximately along here. (Indicating). It was submerged in water—well, that night it started raining about ten o'clock and at 11 o'clock I was on the job and put the pumps working, and the next morning we had the ditches drained.

Q. Now, at that time was there any pipe here—from here up—where did you say that started? A. (Witness indicates on map). 214

Q. That is 8? A. Yes.

Q. And from 8 on down here (indicating) was there any exposed pipe at all? A. We was working on that section.

Q. You were working on it? A. Yes.

Q. And was there any exposed pipe? A. Yes, these field joints.

Q. You mean the field joints weren't covered by Ehret? A. Right.

Q. So in reality you had all of that area open when the rains came. A. That's right.

Q. So approximately the whole area was open? A. That's right.

The Court: Have you anything in your mouth?

The Witness: Yes, sir.

The Court: All right. Take it out while you are testifying.

By Mr. Fitzgerald:

Q. You say you then started pumps to pump the water out? A. That's right.

Q. Now, did you do anything prior to when the rains came to cover the ends of the pipe that was laid open in the trench? A. Yes.

215 Q. What did you do? A. Put that roofing cement on.

Q. Well, that was before the rains, or after? A. Before.

Q. Before the rains? A. Yes, sir.

Q. Now, you say you turned steam on. Was that steam turned on—for what purpose? A. That was the final test on it.

Q. Well, did you turn the steam on before hand to dry any of the moisture out? A. Yes, sir.

Q. And what was that steam that you put on to dry out? A. We had a 10-horse boiler, temporary boiler.

Q. And that is the one you said the ten-pound boiler— A. 10-horse boiler, but you were lucky to get 5 pounds of steam out of it.

Q. Now, when that was turned on did any of the pitch or asphalt run out? A. It got soft.

Q. Did it run? A. A little bit.

Q. And was Mr. Droba around there at that time when it got soft and began to fall out? A. Yes, sir.

Q. Did he make any suggestions to you as to what should be done to prevent that? A. Not to my knowledge.

Q. Didn't he tell you to seal that up and put
216 gadgets attached to the pipe itself to drain the moisture? A. No. I tell you something he did suggest doing and we did: We went along at the center of the line, they got a round hole on the top which they poured at the factory, I believe. We cut one of those out at each center of the length.

Q. And what was that? A. That was to help let the steam out.

Q. Was it to help let the moisture out of the magnesia into the open? A. That's right.

Q. They call that a vent, don't they? A. You could.

Q. That was done to let the moisture get out into the open from the magnesia? A. Yes.

Q. Now, did he also state that you ought to back-fill underneath the Duran System to prevent it from sagging? A. No, sir.

Q. He didn't? A. No, sir.

Q. Did you finally put vents in? A. Yes, sir.

Q. How long was it that you put the vents in after Droba suggested that you do it? A. That he suggested that we do it?

Q. Yes. A. It was done that evening or the next morning.

Q. I am speaking of the pipe vents. A. That's right. That is what I am talking about.

217 Q. And you say it was put in by you the next morning? A. That evening or the next morning.

Q. Mr. Daniels, do you ever recall that you put on the general steam—I am not speaking about this ten pounds but the main steam line— A. Yes.

Q. Was there ever any time that you put steam on there from the main boiler to dry the magnesia? A. Yes.

Q. Isn't it a fact that you put on a heavy-powered steam and Mr. Droba had suggested that you reduce that steam because it might be too terrific and melt the material? A. Yes, Mr. Droba did, but here is the story: He had a helper that was named Ed Krege—

Q. Just answer the question.

The Court: You have answered the question.

By Mr. Fitzgerald:

Q. Did he reduce that?

The Court: You have asked that question.

By Mr. Fitzgerald:

Q. Now, did you put heavy steam on? A. What do you call heavy?

Q. Well, you turned the bolier on, didn't you? A. That's right.

Q. Now, what pressure steam did you put on? A. The pressure steam was approximately 10 pounds.

Q. Now, did the material then begin to flow, that is, the asphalt? A. No more than it did with the small horsepower.

218 Q. Didn't Mr. Droba suggest to you at one time that you were putting on too much steam and that it was causing it to melt? A. The only way I can answer that question if you will let me say—

The Court: Did he say that or didn't he? That is all.

The Witness: He did.

Mr. Fitzgerald: That is all.

Redirect Examination

By Mr. Hilland:

Q. Now, will you explain that? A. What I wanted to?

Q. Yes, what occurred. A. All right. That was approximately between Manhole Loop 5 and 6 and this boy Eddie, they sent him up there to the boiler house to get some magnesia, some pipe covering. So Eddie turned around and said "You haven't got enough steam on the line."

By Mr. Fitzgerald:

Q. Were you there present when Eddie said all this? A. No.

Mr. Fitzgerald: I object.

The Court: Sustained.

By Mr. Hilland:

Q. What personal knowledge do you have of the occurrence? A. Of the occurrence?

Q. Yes. A. I asked the foreman who gave the orders and he said Eddie did. So I went down to get Eddie, and Charley came up.

219 Q. Charley who? A. Droba. And he said he had no business telling them about putting more steam on the boiler.

That is the only time to my knowledge that the steam went up.

Q. Eddie, what was his name? A. Krege.

Q. And he was an employe of— A. Ehret Magnesia.

Q. And under the superintendence of whom? A. Charley Droba.

Mr. Hilland: That is all.

Recross-Examination

By Mr. Fitzgerald:

Q. But the suggestion of Droba was to reduce the heavy steam, wasn't it? A. It might have been Droba's intentions, but Eddie took it upon himself—

Mr. Fitzgerald: I am not asking you Droba's intentions. That is all.

* * * * * * * * * *

220 Thereupon **Albert F. Ecton** was called as a witness for and on behalf of the plaintiff herein, and being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:

Direct Examination

By Mr. Hilland:

Q. Will you please state your full name? A. Albert F. Ecton.

Q. Where do you live? A. 4007 33rd Street, Mount Rainier, Maryland.

Q. What is your occupation? A. Resident Engineer, Washington and vicinity, with the U. S. Engineers.

Q. How long have you been so employed? A. With the U. S. Engineers?

Q. Yes. A. Since 1918.

221 Q. Were you the resident engineer and chief inspector on the job at the Army War College done by Crockett Engineering Company in 1942? A. At that time I was the assistant to the engineer.

Q. Did you have charge of the inspectors at that time? A. Yes, sir.

Q. And during the course of the progress of that work were inspections required? A. Yes, sir, they were.

Q. How often? A. We had an inspector on the job continually.

Q. And did those inspectors make reports? A. Yes, sir. They did.

Q. Was that part of the regular routine of the business of your office? A. Yes, sir.

Q. Those reports are made on every job, are they? A. Every job.

Q. Have you brought the reports relating to this job with you? A. Yes, I have.

Q. And are those the reports that you have before you? A. Yes, sir. These are the reports here (indicating).

Q. And these reports cover what period? A. These reports cover the period of June 30, 1942, to September 19, 1943.

Q. And those are the official reports, the original copies, are they? A. Yes, sir.

222 Mr. Hilland: I offer those in evidence.

Mr. Fitzgerald: Let me see them.

The Witness: May I show you these? (Producing papers.)

Mr. Hilland: If Your Honor please, these are the instructions he got from the War Department. I think we can work it out if we get them in evidence and let him take them with him. Then if we need them—

Mr. Fitzgerald: Can you describe what these reports are in more detail?

The Witness: Those reports give us the number of men that were on the job each day as indicated, and down at the bottom we find just what activity was performed that day, just what the men were doing, where they were working.

Mr. Fitzgerald: These reports are made by someone else, are they?

The Witness: They are made by the inspector on the job.

Mr. Fitzgerald: And then they are in turn turned over to you?

The Witness: Yes, sir.

Mr. Fitzgerald: Now, have these reports that you have here any mark that you require of the inspector?

The Witness: Yes, sir. You will find the inspector has signed each one of those reports.

Mr. Fitzgerald: And he would be the one who is on the job?

The Witness: Yes.

Mr. Fitzgerald: And these are from the regular file?

The Witness: Yes.

Mr. Fitzgerald: I don't believe I could object to them.

223 The Court: No.

How much of that do you want in evidence?

Mr. Hilland: I do not want them all. I don't know which ones until—

The Court: (Interposing) We cannot keep them here.

Mr. Hilland: I would like to have them marked.

The Court: We don't need to mark them.

Mr. Fitzgerald: We don't need to mark them.

By Mr. Hilland:

Q. Now, Mr. Ecton, during the progress of the work on that job did you make inspections from time to time? A. From time to time, yes, sir.

Q. Did you observe—make any observations with respect to the deliveries of the pipe on the job? A. No, sir, I wasn't down there when the pipe was delivered.

Q. You know nothing about the dates of the deliveries? A. No, sir, only the report that we had from the inspector.

Q. Now, how about the progress of making field joints by the Ehret Magnesium Manufacturing Company, did you keep up with the progress of that work? A. To some extent I did, yes, sir.

Q. All right, to what extent, will you explain? A. Well, my first visit down there was with the idea to try to expedite completion of the work. We noted then that we did not have sufficient pipe coverers on the job. We called several meetings with Mr. Crockett and Mr. Droba to see if we couldn't get more asbestos workers and to in-
224 crease the number of field joints to be made in a day. There seemed to be quite a lot of trouble getting asbestos workers.

Q. Did the Ehret asbestos workers keep up with the progress of the workers on the rest of the job? A. No, sir.

Q. Now, do you remember during the progress of the work the rains came? A. Yes, sir, they did.

Q. Can you fix approximately the time when they came? A. Not unless I refer to the reports. I wouldn't want to say.

Q. All right. If you will refresh your recollection by referring to those reports (indicating). A. I would say that was some time between the 7th and the 23rd of August, 1942.

Q. Did you go on the site of the job after those rains came? A. Yes, sir, I did.

Q. Will you tell how high the water came in the trenches at that time? A. Well, some of the trenches was full of water.

Q. Do you remember what portion of the trenches that condition existed in? A. As I recall, from what we would call Manhole A. We had the trenches open from Manhole A to about Manhole E.

Q. Will you point it out on the chart up here, Plaintiff's Exhibit No. 7.

(Witness goes to map.)

225 Q. Here is the boiler house back here (indicating) and here is the officers' mess. A. The trench was open in this area here (indicating). We had a drop right across this road; (indicating) at that point they got very wet. It was open down this line and approximately down toward the band stand.

Q. All right. Thank you, Mr. Ecton. If you will resume your chair.

(The witness resumes the witness chair.)

Q. Now, after those rains came did you attend a conference in relation to what to do about the wet condition resulting from those rains? A. Yes, sir.

Q. Where was that conference held? A. As I recall that conference was held in the field office at the War College.

Q. Who was present? A. To my recollection Mr. Crockett, Mr. Droba, and I believe Major Hall and myself.

Q. Now, what decision or conclusion was reached at that conference? A. It was decided then the best thing to do would be to get a temporary boiler and connect it up to the line up near the old boiler house and see if we couldn't get the lines dried out.

Q. Was that done? A. Yes, sir, that was done.

Q. And who did it? A. Mr. Crockett.

226 Q. And do you remember approximately when steam was put on that line at that time? A. I could again tell that by looking at the reports.

Q. All right. If you will.

Mr. Hilland: If I may to save some time, may I suggest that the witness look at the report for August 14th.

I think we will save some time.

The Court: All right.

The Witness: (Examining paper) Yes, sir. It was August 14th.

By Mr. Hilland:

Q. How long was that steam kept on the line? A. According to the reports here they were still firing the temporary boiler on August 20.

Q. How about on August 24th? A. The report of August 24th does not mention it.

Mr. Fitzgerald: I did not get that answer.

Mr. Hilland: He said the report of August 24th does not mention it.

By Mr. Hilland:

Q. How about report of August 26th? A. No mention on August 26th of firing the boiler.

Q. On what date did they resume the covering of field joints—did the Ehret Magnesium Manufacturing Company resume the covering of field joints? A. Report showed that that was resumed August 24th. 24, 25 and 26 there was two asbestos workers on the job.

Q. After that job was completed and the trenches backfilled, did there come a time when test holes were
227 dug out there? A. Yes, sir.

Q. Can you fix the time approximately when that was done? A. You mean after the installation was completed and steam turned on?

Q. Yes. A. No, I don't recall just about when that was done.

Q. Well, do you remember that it was done? A. Yes, sir. Test holes were dug.

Q. Did you inspect those test holes? A. Yes.

Q. Will you describe the condition of the pipe covering as you found it in those test holes? A. The condition of the covering as we found it, the magnesium installation—insulation, rather—had failed, water had gotten through. When the magnesium got wet it was no longer an insulating material. The steam got through the material and softened the pitch, that is, the tar coating on top of it. The tar coating sagged, was approximately at the bottom and on the sides of the cover.

Q. Will you illustrate from this exhibit here, which I believe is 25, what you mean when you say the pitch sagged. A. When water gets into this covering (indicating) this becomes saturated and it no longer acts as an insulating material. It fails, breaks down. The steam going through there will soften this pitch, which it did when we opened the line. This pitch had sagged.

This covering in places had just a skim of asphalt over it.

228 Q. Was it water tight? A. No, sir.

Q. Now, referring to Plaintiff's Exhibit No. 27, can you use that to illustrate what you mean by what happened to the pitch? A. That is approximately the way it was (indicating).

Q. Well, referring to the other side of it. A. That's right. You see this pitch had run down and got in here (indicating) by being soft. In cases we found this covering had joints right through it. These joints had opened up. This pitch had got in the joint right down on the pipe (indicating).

Q. Now, in those coverings did you examine the way this magnesium covering had been applied, that is, the various layers of it? A. Yes, sir. That is where we noted some of the covering was made into molded sections which has a joint here (indicating).

These joints are in a line, and they had opened up.

Q. How had they been laid? A. In our opinion they should have been staggered, so in case anything came through we would not have a straight line.

Q. Now, did you find that condition existed in any of the covering that had been put on at the factory? A. We found that condition existed in numerous places when we took the cover off.

Q. Did you find it existed in any part that had been put on at the factory? A. Well, it was all, I think. All
229 except the field joints.

Q. Did you find that condition in the field joints? A. I don't recall.

Q. What? A. The field joints were so wet that when we stripped the field joints it would come off approximately as a unit.

Q. Now, do you know what part of that work was done over? A. The part from the boiler house to Manhole F—the section from Manhole F over to the smaller boiler house in the rear of the theater.

Q. Will you point that out on Plaintiff's Exhibit No. 7 please. A. The main power which was here—(indicating) that line was taken up from the power house on down to Manhole F, this point here (indicating).

The line from Manhole F over to this power house here (indicating).

Q. What part of the covering along that line for the distance you have specified on this Exhibit No. 7 was found defective? A. All of it.

Q. How much of it was replaced? A. All of it.

* * * * * * * * * *

232 Cross-Examination

By Mr. Fitzgerald:

Q. Mr. Ecton, you were the resident engineer down at the War College when the work was put in? A. I was the assistant to the Area Engineer.

Q. Who was the Area Engineer? A. Major A. J. Hall, Jr.

Q. And you were the civilian employee of the War Department? A. Yes; I was the engineer's assistant.

Q. Now, were you there when the first delivery of the Durant system was made by the Ehret people? A. No, sir, I was not.

Q. How soon did you come on the job after that, after the first delivery was made? A. Oh, I would say within probably a couple of weeks.

Q. Now, did you see any of the material that was put in to the ground by the plaintiff after you arrived on the scene? A. Did I see any of it that was put in the trench?

233 Q. Yes. A. Yes, sir.

Q. Can you describe what you saw then? A. The pipe, some of the pipe had been installed, I would say from a trap loop in front of the barracks—

Q. (interposing) Would you indicate that on the chart there? A. It was in this location indicated here (indicating on one of the charts in evidence).

The pipe was here (indicating).

Q. Do you know where they started first to put the pipe in? A. Where they started to put the pipe in first?

Q. Yes. A. No, sir, I do not.

Q. So that the area that you saw would be right down in here (indicating on the chart)? A. That is right.

Q. How soon did you see that area after you arrived on the job? A. I got out of the car at this crossing here and walked on down the line (indicating).

Q. So it was almost the very first day you arrived on the job? A. The day the pipe arrived.

Q. No, the day you arrived you say the first day you saw it? A. Yes, sir.

Q. What was the condition of the pipe when it was laying in the ground—you may take your seat—at the
234 time that you describe that you saw it? A. The condition of the pipe?

Q. Describe it. A. Well, as I say, the pipe in the ground, the pipe was wet and I was sent down there for the reason to see what we could do to get organized to help dry it out.

Q. Now, did you make any suggestions at that time to Mr. Crockett as to how he should undertake to dry that pipe out? A. At a meeting in the field office it was suggested that he get a temporary boiler.

Q. You made that suggestion? A. Yes, sir.

Q. You made the suggestion? A. Yes, as I recall I did.

Q. Do you know how many feet of pipe was laid then? A. How many feet of pipe was laid then?

Q. Yes. A. I would not say exactly, no.

Q. Now, were there any joints at that time covered by the Ehret people? A. Were any joints covered?

Q. Yes. A. The joint at a trap loop they were working on that, and that is on the opposite side of the road from manhole A.

Q. Point it out please. A. They were working on a trap loop in this area here (indicating on the chart) and also working on a loop right here (indicating).

Q. Who was working on that? A. Ehret's men.

235 Q. Now, was the pipe over here (indicating) exposed? A. That I do not recall.

Q. Now, was the pipe down in here (indicating) exposed? A. Yes, that was.

Q. So, portions of it were actually exposed at that time? A. Yes, sir, they were.

Q. Now, did you make any suggestions to Mr. Crockett at that time as to how he should attempt to keep that dry? A. By keeping water pumped out of the ditch.

Q. Did you make any suggestions to him as to closing up the material, not putting the joints on, but closing the exposed joints? A. As I recall I probably said: It seems as though the pipe should have been shipped with a protective coating.

Q. I did not ask you that, I asked you—

Mr. Hilland (interposing): Just a minute.

By Mr. Fitzgerald:

Q. I ask you if you made any suggestions as to closing up the material, not putting the joints on, but closing the exposed joints. A. How to keep the trench dry or the pipe dry?

Q. No, the pipe dry. A. I do not recall exactly; probably I did.

We made so many suggestions down there to help out and to get the line put in.

Q. You do not recall any particular suggestion made by you? A. To seal the ends of the pipe.

Q. What is it, sir? A. That suggestion was made to Crockett.

236 Q. By whom? A. Now, I cannot say; I do not recall it.

Q. Now, did there come a time after that, as I understood you to say, when you arrived on the job this material was in the trench, exposed, and some portions of it, down to here (indicating) and beyond this— A. (interposing) Yes, from there down (indicating) to the band stand, and the band stand is right here (indicating).

Here is where the men were working (indicating) and here is the area here (indicating).

Q. By the men "Working" do you mean Crockett's men? A. They were excavating a trench, putting the pipe in, and Ehret came along to make the field joints.

Q. Did you see any of Crockett's men working in there laying the pipe? A. Oh, yes.

Q. And was it exposed at that time when they were laying it? A. Yes, the pipe was exposed.

Q. Do you recall about what date that was, sir? A. No, I do not.

Q. You do not recall? A. No, sir, I do not.

Q. Was it laying in the trench? A. Yes.

Q. And was it raining at that time, too? A. We had had at that time quite a bit of rain.

Q. Sir? A. By that time we had had quite a bit of rain.

237 Q. And all the time they were working there in the trench, the Crocket men there, was rain falling? A. Yes.

Q. Were you there at any time that Mr. Droba appeared on the scene when the trench was wet? A. Yes, I would say so.

Q. And the magnesium was wet? A. Yes.

Q. Do you recall any suggestion made by Mr. Droba to some of Crockett's men or to Crockett's men about keeping that thing dry? A. The only thing I recall by him was that vents could be put in the pipe to prevent steam from coming out.

Q. You recall Mr. Droba said that to Mr. Crockett's men? A. Yes, that vents could be put in the pipe.

Q. Do you recall that after the suggestion was made by Droba to put the vents in that Crockett put the vents in? A. They were put in. I do not recall by whom.

Q. Do you recall how soon or how long after the suggestion by Mr. Droba was made that the vents were put in? A. There was quite a bit of controversy over it before they were put in, and I do not recall just how long it was.

Q. Would you say it was a week or two weeks or three weeks? A. Probably a week or ten days.

Q. Will you look at your records, there, please, Mr. Ecton, and look at the report of June 30, 1942? A. June 30?

Q. Yes, June 30, 1942. A. (upon referring to rec-
238 ords) All right. Here I have it, June 30, 1942.

Q. What did you say? A. I have it.

Q. Would you mind indicating what the report there states? A. On June 30, 1942, the report reads: Lowered four inch line in ditch from boiler room to end of paint shop.

Q. And the boiler room is here (indicating)? A. Yes.

Q. A four inch line? A. That (indicating) is the four inch line.

Q. Down to the paint shop? A. Down to the paint shop here (indicating).

Q. Where would that be? A. The boiler room is here (indicating); the carpenter shop and the paint shop is along in here (indicating).

I recall the carpenter shop and the paint shop were right together in this building here (indicating).

Q. Do you know how many feet it would be from that point, from the boiler room to the end of the paint shop—where is the end of the paint shop? A. As I recall, the paint shop was in this building (indicating), and this line from the boiler room to the end of the paint shop ran here (indicating).

Q. Now, will you look at July 30th—July 3rd, July 3rd I should have said. A. July 3rd?

Q. Yes. A. (upon referring to records) Yes, sir; I have July 3rd here.

239 Q. Read that, if you will, please. A. Welding eight inch pipe and placing in trench from boiler room to end of paint shop.

Q. So that would mean in that distance you testified to they welded the eight inch pipe, that same distance?

Is that correct? A. Yes, that is correct.

Q. Will you look at July 6th? A. (upon referring to records further) All right. I have it, July 6th.

Q. Will you read that? A. Ran eight inch line from paint shop to loop No. 2 in trench.

Q. Where is loop No. 2 in trench—of course, that work was being done by Mr. Crockett, was it not? A. Yes, sir. You see, with the Government, all the work was done by Mr. Crockett.

Q. I see. A. Loop No. 2 is right here (indicating).

Q. Now, July 8th—July 7th, rather; July 7th. A. (upon referring to records) All right. July 7th.

Q. Will you read that, please? A. Poured concrete for sides of manhole F.

Q. Where is manhole F? A. Manhole F is right—is right here (indicating).

Q. Will you continue on reading that? A. Placed reinforcing rods for side of manhole G.

Q. Where is that? A. Manhole G is here (indicating).

240 Q. Now, read on. A. Excavated trench for loop No. 4, from loop No. 4 to manhole A.

Q. Show that. A. Manhole A is this manhole here (indicating).

Loop No. 4 is here (indicating).

Q. Will you read the rest of that? A. Welded eight inch and four inch pipe and placed in trench from power house to building 55-B.

Q. Place that please. A. The power house is here (indicating) and building 55-B is this building here (indicating).

Mr. Fitzgerald: Thank you. You may resume your place on the witness stand.

(Thereupon the witness who had left the witness stand returned to it.)

By Mr. Fitzgerald:

Q. Now, will you read July 17th, if you will, please? A. (upon referring to records) All right; July 17th.

Q. Will you read that, please? A. Welded pipe from building 55-B to manhole A, grading the trench from manhole A to manhole B.

Q. Will you point that out on the chart there? A. Building 55-B is at this point (indicating); manhole A is at this point (indicating).

Q. Thank you. Will you go to July 20, please, sir? A. (referring further to records) All right, sir.

Q. Will you read that?

Will you give, first of all, turn to the page up in
241 front there (indicating) as to the condition of the
weather—that is July what? A. (referring to records) July 20th. Thundershowers in late afternoon.

Q. Now, will you read the report there? A. Unloading eight inch and four inch pipe, and placing along trench from manhole A to manhole B.

Welding seals on expansion loop and excavating trench from manhole A to manhole B.

Q. Will you again point it out, please? A. Manhole A and to manhole B is here (indicating), A to B.

Q. Now, would you turn to page 23—suppose you remain there and turn to July 23, 1942, please, sir. A. (upon referring to records) July 23, 1942.

Q. Yes, sir. A. All right.

Q. Will you read the condition of the weather, too? A. July 23rd, the weather was clear.

The report reads: Unloading pipe, making test on four inch and eight inch pipe from building 48-A to manhole X.

Excavating trench from manhole A to manhole B.

Note: Could not make a complete test on eight inch pipe due to the compressor not being sufficiently large to get proper 150 pound pressure.

The four inch line held on test, 109 pounds.

Two leaks were found in line and will make final test tomorrow, the 24th.

Q. Do you know what was meant by the two leaks
242 that were found in the line—was that in the pipe?
A. That would be at the welding, where the sections of pipe were welded.

Q. Turn to July 24, 1942, and tell us the condition of the weather. A. July 24th?

Q. Yes, sir. A. (upon referring to records) The weather was not indicated on the report?

Q. July 24, 1942? A. July 24, 1942—we only had two men on the job that day.

Q. What is that before there (indicating on the record)? What is that date? A. July 24, 1942.

Q. What does it say about the weather? A. Cloudy and rain.

Q. Was anything done on that job by Mr. Crockett's men? A. Yes, sir.

Q. Will you mind stating what it is? A. Tying in eight and four inch pipe in passageway of building 55-B; making test on eight inch supply line to manhole X to building 48-A.

Q. Will you please point that out?

Mr. Hilland (interposing): If your Honor please, I understand that manhole X is not shown on the plan.

The Witness: I do not locate manhole X on the plan.

By Mr. Fitzgerald:

Q. Mr. Droba called my attention to the fact that
243 no manhole X is in there.
Is that correct? A. That is correct.

Here (indicating) is building 48-A.

Q. Now, can you indicate there on July 4th as to the tests made? A. July 4th?

Q. July 24th. A. 24th.

Q. Yes. Will you read it please? A. Making test on eight inch supply line from manhole X to building 48-A.

Q. I understand that there is no manhole X on there but now was there any test made on that pipe, from the records there, from the time it was laid up until July 24, 1942? A. Were there any tests made on any other pipe?

Q. Yes. On any other pipe laid?

You know what I mean by "tests"? A. That is right.

Q. What does it mean? A. A test means to block off a section of pipe and put pressure on the pipe in the ground.

Q. See whether or not the pipe is actually tight? A. That is right.

Q. Whether it looks that way or not? A. Whether it looks that way or not.

Q. Are there any tests indicated there from the time the pipe was laid there to the 24th? A. I will look on the reports to see if they were.

244 Q. Please? A. On July 23rd, the report indicates, make test on four inch, eight inch pipe on building 48-A to manhole X.

Q. What is the date? A. July 23rd.

Q. And on that particular date they were not finished, were they? A. On the 23rd?

Q. Yes. A. No, sir.

Q. Now, are there any tests on that pipe for all the time prior to that date, from the time it was laid, the time the pipe was laid out, to the 23rd of July? A. Let me check these reports and see what they would indicate.

Q. I think you may refer to June 30, 1942.

You will see that they laid four inch pipe. A. The reports indicate that is the first test that was made.

Q. From June 30 to July 24th, the first test was made by Mr. Crockett's men, and no tests were made in between that time? A. Not according to the reports, no, sir.

Q. Now, through all that period—

Mr. Hilland (interposing): Did you say the 23rd of July?

The Witness: The 23rd of July is the first test indicated in the report.

By Mr. Fitzgerald:

Q. So, from June 30, 1942, to July 23, 1942, there were no tests made on that line? A. That is right, yes. 245

Q. So that pipe was exposed all that time and it was impossible for the Ehret Company to close any joints there because there was no tests put on the pipe in that period of time, from June 30, 1942, to July 23, 1942.

Is that correct? A. Yes, sir. The pipe could not be covered until it is tested.

Q. So it was actually exposed all that period? A. If it was in the ground it was exposed.

Q. Now, will you go to August 7, 1942, please, sir? A. August 7, 1942.

Q. Excuse me just one minute, please; pardon me.

Yes, that is right.

Will you indicate there, please, sir, the condition of the weather? A. Cloudy, rain in the afternoon.

Q. Now, will you read or tell us what the report says there, sir? A. Place four inch pipe in trench and weld it from loop No. 7 to manhole E.

Q. Will you point down here (indicating the charts on the blackboard), sir, as to what that is? A. (indicating on the charts) Loop No. 7; manhole E (indicating).

Q. And will you indicate on here as to whether or not any tests were made of that pipe? A. No. This report reads: Placing the pipe in the ground.

246 Q. Yes. A. The pipe has to be placed in the ground, welded, and then the test put on.

Q. So if there is nothing in there to indicate the tests were made, there was no test made? A. Well, the test could not possibly be made.

Q. I see.

Will you look at August 12th—that was August 7th? A. Yes.

Q. Would you say it was rainy in the afternoon? A. Cloudy and rain, yes.

Q. I mean: What does it say? A. Cloudy, rain in afternoon.

Q. Now, will you look to August 12, 1942, and indicate the condition of the weather on that date? A. Partly cloudy, rain late afternoon.

Q. Yes. Just one minute: On the first question—hold that, if you please.

On July 23rd, when the first test was made, was there any pipe in the ground beyond the point where the test was made? A. July 23rd?

Q. That was the time you said the first test was made. A. Were there any pipe in the ground?

Q. Beyond the point where the test was made. A. Well, from the points as indicated from the boiler house to the manhole X, the pipe was in the ground, and that is the line the test was made on.

Q. Can you point out on the chart there, Mr. Ecton, exactly where that pipe was laid in the trench when the
247 test was made on the 23rd? A. Let me read the report first.

Q. Yes. A. On July 23rd?

Q. Yes. A. As I recall, manhole X is in this vicinity (indicating)—let me get myself oriented.

Q. I cannot hear you.

Will you speak up so I can hear you? A. Yes. As I recall, manhole X is in this vicinity here (indicating) and building 48-A is this building here (indicating).

Q. So a pipe was laid between building 48-A? A. Yes.

Q. To manhole X? A. From manhole X. As I recall, manhole X is in this vicinity (indicating).

Q. Now, do you recall whether or not there was any other pipe extending beyond that portion? A. Coming down this way (indicating)?

Q. Yes. A. The report, probably, would indicate that.

Q. Counsel has made a suggestion that manhole X is not indicated on this chart and we cannot find it, although these reports indicate it. A. Yes.

Mr. Fitzgerald: I wonder if counsel will stipulate with me where manhole X should be, if there is such a point as manhole X.

Can you point it out?

Mr. Hilland: Yes. Just to the right where he was pointing.

248 (At this point Mr. Crockett approached the chart and made a mark thereon.)

By Mr. Fitzgerald:

Q. Will you mind watching him? A. All right.

Mr. Crockett: Manhole X is ten inches off building 55-B.

Mr. Hilland: We are willing to stipulate that.

By Mr. Fitzgerald:

Q. Do you recall whether that is the area? A. As I say, it is in that vicinity.

Q. Do you remember whether there was any other pipe beyond that point of manhole X? A. The report of July 22nd reads—

Q. (interposing) July 23rd, is it? A. No, that was—the report of July 22nd reads:

Placing concrete and welding expansion loop No. 2—this loop completed.

Q. Now, will you point that out, please? A. Expansion loop No. 2 is here (indicating); that would also be in that line from manhole X, over to the power house.

So, from indications of the report, there was no other pipe in the ground.

Q. So the reports would indicate no other pipe was in the ground beyond that? A. Yes, sir.

Q. Now, will you please turn to August 7th—just a minute.

Turn to July 27th, please, and give the report, please.

249 July 27th. A. July 27th?

Q. Oh, just a minute—go back to July 25th. A. July 25th?

Q. Yes.

Read that. A. Weather cloudy. Testing eight inch pipe from building 48-A to manhole X.

Q. Will you go to July 27th? A. July 27th: Weather clear. Unloading pipe and placing long trench; excavating trench from manhole A to manhole C, working in manhole G.

Q. Go ahead. A. Note, loops Nos. 4, 5 and 6 are not completed. This will enable Crockett to complete this line to manhole C and make tests.

Q. Will you point that out on the chart, please? A. Loops 4, 5, and 6 on that date completed.

This will enable to complete line to manhole C and make tests.

Manhole C is right here (indicating).

Q. So from up here (indicating), down to there (indicating) they had the pipe in the ground? A. Yes, sir, from loop 4.

Q. From Loop 4? A. To manhole C.

Q. Now, would you look and see whether or not any tests were made on that date, July 27th? A. No, sir. That was the date that they completed it.

250 Q. And no tests were made? A. No, sir.

Q. Turn over to July 28, 1942—no, skip that, please. I don't want that.

I want August 7, 1942. A. August 7, 1942?

Q. Oh, excuse me. July 29th.

Pardon me, turn to July 29th. A. July 29th, 1942?

Q. Yes, sir. A. I have it.

The weather was clear. Laying concrete and welding eight inch and four inch pipe from manhole A to manhole B; excavating for grade from Manhole A to manhole C.

Working in manhole I.

Asbestos workers cover pipe from building 48-A to manhole.

Q. What manhole? A. Manhole X.

Q. Will you look at August 7, 1942, as to the condition of the weather and report? A. August 7th?

Q. Yes. A. August 7th: Cloudy, rain in afternoon.

Placing four inch pipe in trench and welding from loop 7 to manhole E.

Q. Point that out, if you will, please. A. (indicating on the chart) From loop 7 to manhole E.

Q. Now, is there any indication there on the record as to whether there was any wet condition of pipe? A. No, sir. The report does not mention any wet condition of the pipe. 251

Q. What else does it mention there? A. Loop 7 to manhole E, install loop No. 5.

Q. Point out No. 5, please, sir. A. No. 5 is this point there (indicating).

Q. Is there any indication there as to the pipe being exposed, or would you know whether it was exposed to the weather at that time? A. Well, if they installed the loop on that day, it was definitely exposed to the weather.

Q. Will you look at the report as to the condition of the weather on August 12, 1942—the 12th. A. August 12, 1942?

Q. Yes. A. All right.

Q. Will you read that? A. Partly cloudy; rain late afternoon.

Q. Will you look at August 14, 1942, and give us the report on that? A. August 14, 1942, cloudy, showers.

Q. 1942, the 14th? A. Yes.

Q. Give us the report on that, if you will, please. A. Completed connecting temporary stationary boiler and started firing same at eleven o'clock a. m. to dry out pipe insulation; kept steam up to twelve o'clock.

Carpenter stripping forms in manhole K.

Pumping water from trenches.

252 Q. Now, who was doing that work that you have just narrated? A. That work was performed by Mr. Crockett.

Q. Now, August 15, 1942. A. August 15, 1942—yes, I have it.

Q. Give us the report on that, please. A. Weather cloudy.

Q. Also the report. A. Laying and welding pipe between Loop 7 and manhole E.

Q. Will you point that out, please? A. (indicating on the charts) Loop 7; manhole E.

Q. Laying and welding pipe? A. Yes, sir.

Q. Will you continue on? A. Pumping water from trenches; drying out insulation on pipe from central heating plant to manhole A with steam and conduit.

Q. Will you please point out on that the area that is covered by that steam? A. From the heating plant?

Q. Yes. A. To the manhole A.

From this point (indicating) to this point (indicating).

Q. Go to August 16th, if you will, please. A. August 16th?

Q. Yes. A. I have it.

Q. Will you read it? A. Weather cloudy. Lowered and welded six and four inch line in trench from manhole E to loop No. 9.

253 Fired temporary boiler to heat and dry pipe insulation.

Q. Will you mark the area covered between manhole E and loop 9? A. (indicating on the charts) This is manhole E and there is loop 9—this area here.

Q. And August 17, 1942, please. A. August 17, 1942?

Q. Yes. A. Weather cloudy.

Fired temporary boiler to dry pipe insulation.

Worked on four inch pipe in manholes B and C for tests. Tests made and passed one hundred and fifty pound hydrostatic test eight inch line; from A to C, one hundred.

Also made and passed a test on four inch line.

Removed surplus dirt in front of boiler room and paint shop; also cleaned coal yard.

Removed dirt and water from under cover.

Some pipe in trench.

Stripped forms from K and finished cement.

Worked on cover from manhole X.

Q. Will you show on the chart there where the tests were made—that is August 17, 1942. A. That is right.

B to C (indicating); manhole B is here (indicating) and manhole C is there (indicating).

Q. Thank you. A. That section there (indicating).

Q. Now, can you indicate where the water was being pumped where the joints were uncovered in the trench?

254 Can you point to that area where the pump was used? A. The report reads: Removed surplus dirt in front of boiler room and utility paint shop; also cleaned

trash from coal yard; removed dirt and water from uncovered joints of pipe and trench.

Q. That is what I mean.

Would you "X" that—can you put that area there (indicating on the chart)? A. Not unless that was a general condition and this area we are talking about from manhole B to C.

This (indicating on the chart) is the area that the report was talking about, manhole B to manhole C.

Q. That would indicate to your mind that the water was being pumped out of the trench from where the joints were uncovered in that area? A. Yes, sir.

Q. August 18th, if you will, please. A. August 18th—weather cloudy—

Q. (interposing) Just a minute.

Can you tell from that record whether they were working by loop 9 when they made tests between those two joints?

Wait a minute, now. A. Loop 9.

Q. Yes. A. No, sir; they were not; they were working from manhole A to C.

Q. Where is that? A. (indicating on the chart) This is manhole—this manhole here; Loop 9 is around here (indicating).

255 Q. Were they working up in that area in between here and all (indicating)? A. That is not indicated on the report, no, sir.

Q. Do you know of your own personal knowledge whether they were laying pipe there? A. That is pretty hard to say.

Q. Will you go back to August 15, 1942, please? A. August 15, 1942?

Q. Yes, sir. A. I have it.

Q. What does that say? A. Weather cloudy; laying and welding pipe between loop 7 and manhole E.

Cleaning out and fine grading trench between manhole E and loop No. 8.

Q. Will you point that out between loop No. 7 and manhole E? A. Loop No. 7 is at this point (indicating on the chart); and manhole E is at this point (indicating).

Q. I see.

Will you read, further on please? A. Cleaning out and fine grading trench between manhole E and loop 8.

Q. Point that out, please. A. Manhole E (indicating); and loop 8 (indicating)—that section here (indicating).

Q. Now finish. A. Pumping water from trench, drawing out insulation on pipe from central heating plant to
256 manhole A with steam and conduit.

Q. Now, would that indicate to you that they were actually working, laying pipe in that particular area when, on the 17th of August, as you have testified, they were firing a temporary boiler to dry the insulation and make the water test? A. This report would indicate that the pipe from the central heating plant to manhole A was wet, and before it could be completed it had to be dried out.

It reads: Drying out insulation on pipe from central heating plant to manhole A with steam and conduit.

Q. You are reading from the report dated what? A. August 15th.

Q. Would not that indicate that there was some work being done there by them on the 17th? A. Work being done by them on the 17th?

Q. Yes. You testified the 17th they were firing the temporary boiler to make the test? A. Yes, it would, yes.

Q. So Crockett's men were working in the ditch and the material was exposed then? A. Well, they would not be working on the ditch in firing the temporary boiler.

That is set up this way (indicating).

Q. On the 15th they were? A. Not necessarily, to dry out the covering of steam from the boiler—that was to dry out the covering of the steam.

Q. But they were laying material from the trench on the 15th? A. Yes, from loop 7 to manhole E.

257 Q. Now, is not that beyond the point where they tested on the 17th?

In other words, where did they test it on the 17th? A. Yes.

Q. From manhole B and C, tested. A. Firing temporary boiler to dry out insulation work on four inch line in manholes B and C for tests made and passed 150 pound test on eight inch pipe, manhole A to C.

Manhole A to C is this point here (indicating on the chart).

Manhole A to manhole C (indicating); this one here.

On the 15th they were drying out the pipe from the heating plant to manhole A.

Q. They made that test on the 17th? A. From A to C?

Q. Yes.

Does the 15th show they had laid some material beyond the point of where they tested? A. Yes, that is possible.

You have to put the material in the ground before you can test it.

Q. I did not hear you. A. I say you have to put the material in the ground before you can test it.

Q. What I am getting at is this:

There was some pipe laid in the trenches by Crockett beyond the point of the demarcation you have there, or the location of the tests. A. Are you referring to the tests from the boiler house to manhole A?

258 Q. Yes; that is the test of the 17th. A. That is right. On the 17th?

On the 17th he was testing his line from manhole A to manhole C.

Q. Yes. A. On the 15th he was drying out the covering from the boiler house to manhole A.

Q. What else was he doing? A. Drawing water from the trenches, laying and welding pipe between loop 7 and manhole E.

Q. Where is that located?

Where is that loop 7 of manhole E? A. (indicating on the chart) Manhole E; loop 7.

Q. So then, he was working there and laying pipe in that area when the test was made between E—what was the other? A. A to C.

Q. He was making a test on that area? A. That is correct.

Q. And at about the same time he was laying pipe in this other area? A. That is right.

You have to put your pipe in first to test it; then put the cover on.

Q. So you made the test from this area (indicating) to here (indicating) to see whether or not it was holding the steam? A. That is right; from A to C; manhole A to manhole C.

Q. And at the same time he was laying material in that trench all along there (indicating)? A. Yes, sir;
259 that is right.

Q. Thank you.

Now, will you go to August 18th—excuse me.

That material was uncovered that he was laying in that extra area beyond the test area? A. That is the field joints were uncovered?

Q. That is what I mean. A. The field joints are uncovered until you test them and then it is all covered.

Q. August 18th now. A. August 18th?

Q. Yes. A. I have it.

Q. Will you read what that says? A. Weather cloudy; fired temporary boiler pumping water from trench and manholes.

Removed surplus dirt from front side of paint shop and parking space.

Poured concrete on manhole X and No. 3 hangar.

Q. And you say they were firing the boiler? A. Yes; firing the boiler.

Q. To pump out water from trenches? A. To pump out the water from the trenches, and manholes.

Q. Thank you.

That would indicate, would it not, from that record, that when the pipe is being laid by Crockett or was being laid by Crockett on the 15th there, as you have testified to, that there was water in the trench while the pipe was being laid? A. While the pipe was being laid?

260 Q. Yes. A. No, sir. They could not lay the pipe with water in the trench; they have to pump the water out.

Q. Does it indicate there as to the rain being in that area on August 18th, or water being in that area? A. It would be if it was raining previous to that.

Q. So they were pumping out on August 18, 1942, water in these trenches? A. Yes, sir.

Q. Look on August 19th, please. A. August 19th?

Q. Yes. A. I have it.

Q. What does it say? A. Weather cloudy. Fired temporary boiler to dry pipe insulation.

Formed top of manhole B and fitting and welding at manhole C.

Q. Give that manhole B and C again, please, on the chart. A. (referring to the chart) Manhole B is here (indicating), and manhole C is here (indicating).

Q. All right. A. Welding at manhole C.

Running six inch pipe, loop 9 or between 9 and manhole F.

Q. Point that out, please. A. (indicating on the chart) Manhole F; loop No. 9—this area here (indicating).

261 Q. Continue. A. Draining ditch between manholes F and G.

They are here (indicating).

Pumping and bailing water from entire steam line trench and unloading pipe.

Q. Will you indicate as to where the pumping and bailing of water from entire steam line trench would cover—what area that would cover? A. The entire steam line trench would take you from here (indicating on the chart) all the way back here (indicating). That would be the entire line and he refers to it.

Mr. Fitzgerald: I think that is all. Just one second. Thank you; that is all.

Redirect Examination

By Mr. Hilland:

Q. Mr. Ecton, will you refer to your report of June 25, 1942?

I might say that I have only three or four thoughts that I want to refer to. A. You say June 25th?

Q. I am sorry; I do not have it—

Mr. Fitzgerald (interposing): July 25th.

By Mr. Hilland:

Q. Do you have a report for June 25, 1942? A. I am sorry I do not.

I have a report of June 30th—that is the first one I have.

Q. June 30th is the first one you have? A. Yes.

Q. You do not have any report showing the date of the arrival of the first load of pipe? A. I do not have 262 it with me, but that report is in the office.

Q. That is one of the reports you have not been able to locate.

Is that right? A. The chances are it is.

I had this made up when the reports were made, when I was requested to bring these reports.

Q. Will you refer to your report of July 7th, Mr. Suter's report of July 7th? A. All right, sir.

Q. What does that show with respect to the supply of pipe on the job? A. I will read the whole report:

Poured concrete for sides of manhole F.

Q. Could not we save some time if you could go to that part relating to the supply of pipe? A. I beg your pardon?

Yes, sir. Note: Ran out of eight inch pipe on this date. Shipment due today has not arrived.

Q. Now, will you refer to the report of July 9th with respect to the supply of pipe? A. Report of July 9th?

Q. Yes. A. Note: Crockett superintendent states that he will have to make a layoff at the close of work today, Thursday, as there has not been no shipment of pipe received.

Q. Now, with respect to that date of August 17th, about which you were last testifying under cross-examination, 263 August 17, 1942, I ask if that report does not show that the defendant Ehret Company had three asbestos workers working making the field joints.

Mr. Fitzgerald: I object to the leading question.

The Court: I sustain the objection.

By Mr. Hilland:

Q. I will ask you what that report of August 17th shows with respect to the number of workers the Ehret Company had on the job? A. On August 17th, the Ehret Company had two asbestos workers and one helper on the job.

Q. That was during that period of time when they were drying out and had the temporary boiler on, was it? A. Yes, sir.

Q. From the 14th to the 24th? A. That is correct.

Q. Mr. Ecton, these tests made of that line, after it was laid and welded, was that a steam or a water test? A. That was with air and water.

Q. That was in accordance with the specifications, was it not? A. Yes, sir.

Q. They called for what kind of tests? A. Hydrostatic test.

Q. That means what? A. Air and water.

Q. Now, you testified on cross-examination that at a meeting you had with Mr. Crockett and Mr. Droba that the field
house on the job, that you suggested that they put up
264 a temporary boiler? A. Yes, sir.

Q. Was Mr. Droba present when you suggested that? A. As I recall, he was.

Q. Did he concur in or object to that suggestion? A. As I recall, that suggestion was made to Mr. Crockett.

Q. Was not Mr. Droba present? A. Mr. Droba was present.

Q. Did he make any objection to it? A. I do not recall of any comment from Mr. Droba.

Q. You also testified on cross-examination that you had suggested that it seemed to you that the ends of the pipes, the pipe covering, ought to have been welded before they were shipped.

Do you remember when and where and to whom you said that? A. I think that comment was made several times on the job as a matter of protection of the pipe.

Mr. Hilland: That is all.

Re-Cross Examination

By Mr. Fitzgerald:

Q. On August 17th you said that they had only two asbestos workers?

Is that right? A. That is right.

Q. And they were pumping out and drying out the entire —A (interposing) That is correct.

Q. Whether they had two asbestos workers or fifty asbestos workers, the asbestos workers could not close those
joints up unless they were dry, could they? Should
265 they? A. No, sir. The joints must be dry before
you close it.

Q. So it would not make any difference whether there were two or fifty asbestos workers, they could not close them up? A. No, sir, not if they were wet they could not close them up.

Q. You said that other reports there showed that the pipe was slow in delivery. I forget now when it was.

That would not have any bearing on the pipe in the trench getting wet, would it? A. It would; because the test has to be made from manhole to manhole.

Q. Whether the pipe was laid or not, it must be in the trench and dry before—A. (interposing) Yes.

Q. So, the fact that the pipe was delayed in delivery had nothing to do with it? A. Unless the break was from manhole to manhole.

Q. Yes. A. What we tried to do with this line was make the tests at the manhole, the proper places.

Q. Supposing the pipe was either purposely or accidentally delayed in being delivered on the job, the fact it was delayed would not affect the fact that the pipe was wet in the trench? A. Unless you had a section in between manholes.

* * * * * * * * * *

266 Mr. Hilland: May we approach the Bench?

The Court:

(Counsel for the respective parties approached the bench and, out of the hearing of the jury, the following occurred:)

Mr. Hilland: If your Honor please, I have some witnesses by whom we could prove the universal custom in the District of Columbia among general contractors and subcontractors with respect to the protection of subcontractors' materials on the job from the weather elements.

Our view of the case is that this obligation to protect the materials on the job was covered by the contract, but if your Honor does not agree about that, then I have evidence of the universal custom and the "universal custom" is admissible if the question is not settled by the contract.

If it is settled by the contract, I suppose evidence 267 of that custom is not admissible.

The Court: If it is settled by the contract, certainly the "custom" is not admissible.

Mr. Hilland: That is what I have in mind.

So it may require a ruling by your Honor whether or not it is or is not.

Mr. Fitzgerald: You mean you have a condition here, Mr. Hilland—we sold the goods, and delivered it to you on the job; then you had a certain thing to do with that material.

Mr. Hilland: Not with your material.

The Court: I cannot hear you.

Mr. Fitzgerald: I am sorry.

We sold you certain material. We delivered it to the job. You took possession of it.

After that job was completed, you had certain things to do, namely, tests and so forth, and * * * Now, the general contract between you and the Government provides that the contract is to protect all the material on the job, keep it safe and sound and proper. It is, then, by operation of the contract itself, the Government's property, so then whether it is the custom or not, the custom as to whether the subcontractor should do something with the material in this case would have no bearing on it, because it does not apply.

Mr. Hilland: If your Honor please, that is the basis of our argument. The general contract did put that responsibility on the Crockett Engineering Company, but we contend that by virtue of the subcontract they impliedly assumed all of our liabilities and responsibilities in relation to material and workmanship that they contracted to furnish and install.

268 For instance, there has been another case which Justice Adkins ruled on, and there is his conclusion * * *

The Court: Where do you make that claim in your complaint?

You complain first that the pipe was not delivered according to schedule so the project was unreasonably delayed. You are not relying on that as a ground of recovery?

Mr. Hilland: Only insofar as it may have contributed to the resultant damage and defect.

* * *

The Court: I will not rule on your other question, then, for the present.

I will exclude the question of custom for the present. If it comes in later, all right.

Mr. Hilland: By way of rebuttal?

The Court: Yes.

Mr. Hilland: That is what occurred to me. It may not be admissible until then.

The Court: Well, I will see. I will cross that bridge when I get to it.

* * * * * * * * * *

270 Mr. Fitzgerald: May we approach the bench?
The Court: Yes.

(Counsel for the respective parties approached the bench and, out of the hearing of the jury, the following occurred:)

Mr. Fitzgerald: I want to argue the question of a motion for a directed verdict.

(The motion for the directed verdict on behalf of the defendant was then argued and the following occurred:)

The Court: I think the motion should be averruled. You may take an exception if you wish.
Mr. Fitzgerald: Thank you.
Mr. Hilland: Now, while we are up here, there is one question that we will have to take up early in the presentation of their evidence.

271 We allege in our complaint that the plans provided that the manufacturer shall guarantee the installation of his underground equipment and in their answer they denied that that is guaranteed.

It seems all the other evidence with respect to the care of materials on the job and the causes of the defects are not properly admitted in evidence by way of defense unless they first show the non-existence of the guarantee, because—
The Court (interposing): I will wait until I reach that question.
Mr. Hilland: All right.

(Counsel for the respective parties resumed their places at the counsel table and the following occurred within the hearing of the jury:)

* * * * * * * * * * *

Thereupon **Charles B. Droba** was called as a witness for and on behalf of the defendant, and being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:
Mr. Hilland: If your Honor please, I do not want to be guilty of taking any unfair advantage, but I believe if I do not say something I may be in that position.

I believe I see one of the defense witnesses in court and I know you will not let him testify—

Mr. Fitzgerald (interposing): He will not testify.

Mr. Hilland: Excuse me. I assumed he was going to testify.

Direct Examination

By Mr. Fitzgerald:

272 Q. What is your full name? A. Charles B. Droba.

Q. Where do you reside? A. 3412 Oliver Street, Northwest.

Q. That is in the District of Columbia? A. Yes.

Q. What is your business, Mr. Droba? A. I am a representative for the Ehret Magnesia Manufacturing Company, with offices at 312 Seventh Street, Southwest.

Q. So you are the local representative of the company? A. I am.

Q. Now, do you have any profession? A. Yes.

Q. And what is that profession? A. I am an engineer.

Q. What kind of an engineer? A. Mechanical, heating, ventilating and plumbing.

Q. And your experience along that line has been—do you mind giving your education and your experience? A. I attended the Lewis Institute of Technology in Chicago. I think I left there in 1924 and I have been in the engineering profession ever since.

I am a member of the American Society of Heating and Ventilating Engineers.

Q. And in order to be a member of that society, what are your qualifications? A. Well, you must—let me remember that, if I can: You must have been either practicing or in a position to direct the design and installation of 273 heating, that is, any mechanical means; you must have been doing that sort of work for at least ten years, I believe it is.

Q. Do you recall when you were admitted to that organization? A. I just applied for that recently and have been notified that I have been elected a member.

Q. Now, will you state how long you have been connected with the Ehret Magnesia Manufacturing Company? A. Since 1940, I believe.

Q. And your capacity in that connection has been what? A. As an engineer and sales superintendent on their jobs here, not directly as superintendent except that—well, I believe you could call it a superintendent.

Q. Now, by "superintendent" what do you understand it to mean? A. Directing the course of the work, making the necessary recommendations as to the proper and improper way to install it.

Q. Now, have you had any—what was your employment prior to your association with the Ehret Magnesia Manufacturing Company? A. I did not hear that.

Q. What was your employment prior to being connected with the Ehret Magnesia Manufacturing Company? A. With the defendant; I was mechanical engineer for the United States Housing Authority from 1935 until 1940.

Q. 1940? A. Yes, sir.

Q. Now, in that connection with the United States Housing Authority, what were your duties as an engineer? A.

274 Well, I was responsible for the mechanical equipment, specifications, and planning of housing projects in fifteen states.

Q. And did that have anything to do with steam distribution systems? A. Oh, yes, yes; heating and plumbing.

Q. And was that period of time that you have indicated all confined to that particular work? A. More or less, yes.

Q. Now, that work is it similar, generally similar, to the work that you are now doing and have been doing with the Ehret Magnesia Manufacturing Company? A. No.

Q. How does it differ? A. There is a difference there, because while with the Government I had the writing of specifications to do, and the checking of plans and, at times, the supervision of the installation, not actual supervision; let's say that it was the inspection of installation of those projects, now I have nothing to do with writing specifications or doing any planning outside of making suggestions to various engineers around Washington and in the Government as to how the underground distribution system should be laid out to advantage.

Q. Now, did you have any knowledge as to the class of installation of the heating system done at the War College by Mr. Crockett before you had been on the job? A. Yes.

Q. Now, would you mind stating just what you did in connection with that?

Tell us who you talked with and so on. A. Well,
275 my contacts were mostly with Mr. Goddard.

Q. And who was Mr. Goddard? A. I believe, Mr. Goddard is the chief designer and engineer at the United States Engineer's Office.

Q. Chief Designing Engineer? A. Yes; and at First and Douglas Streets.

Q. And you conferred with him.

Now, without stating what you said, did you confer with him with reference to the work on the War College job that Mr. Crockett was bidding on? A. Well, we discussed the fact that the job was going ahead; that the job would be built.

Q. Now, did you have any conversations at all with Mr. Crockett concerning the job that he was bidding on? A. No, not until after the job was out for bids, and I had taken the job off.

Q. What do you mean by you had "taken the job off"? A. Measured the length of pipe required, checking on the thickness of insulation necessary, and submitted my "takeoff" which amounts to what is necessary, and it was submitted to the factory at Valley Forge.

Q. And that is the factory of the defendant, the Ehret Magnesia Manufacturing Company? A. Yes. They submitted a proposal and I submitted that to Mr. Crockett.

Q. And that proposal that they had submitted through you to Mr. Crockett is the one of the latter part of April, April 21, 1942, that is in evidence.

Is that correct? A. I believe that is correct. That
276 is the date of our proposal. It is—

Q. (interposing) May I have it? A. (handing a document to Mr. Fitzgerald) Yes.

Mr. Hilland: All these exhibits are in order.

Mr. Fitzgerald: Plaintiff's Exhibit No. 6 is a letter of April 21, 1942.

By Mr. Fitzgerald:

Q. I will ask you to read that over and see if that is the letter (handing a paper writing to the witness). A. (after examining the document last referred to) Yes; this is the one.

Q. That is the one? A. Yes.

Q. And you had submitted your take-off to the main office and then, on the strength of that, the main office made this proposal? A. Yes.

Q. Now, prior to your submitting to Mr. Crockett, I mean prior to your submitting your take-off to the home office of the defendant company, did you confer with Mr. Crockett? A. No, not that I recall.

Q. Now, after you sent it on to the main office, your take-off, and that letter was sent to Mr. Crockett, did you confer with Mr. Crockett? A. Oh, yes.

Q. Now, will you give to his Honor and to the jury the gist of the conversation had between you and Mr. Crockett?

Mr. Hilland: Now, may we have the time, please,
277 fixed?

Mr. Fitzgerald: Yes.

By Mr. Fitzgerald:

Q. The letter is dated April 21, 1942.

Can you give the time and place or places and times when you had these conversations or this conversation with Mr. Crockett? A. It may have been the following day or a few days later; I do not recall that, but it was in Mr. Crockett's office that I submitted the proposal to him.

Q. And where is Mr. Crockett's office? A. Bethesda, Maryland.

Q. Can you tell us the gist of the conversation between you and Mr. Crockett concerning that offer of the 21st of April, 1942? A. Why, I believe I explained what our proposal consisted of and the type of material we were submitting.

I believe I gave him a catalogue showing him just what his work would amount to.

Q. Is that the catalogue that is in evidence here?

This is your catalogue (producing a catalogue)? A. (upon examining the catalogue last above referred to) Yes. I am not sure that that is the one I gave him originally. We have similar catalogues to that which show only the Durant insulation pipe.

It may be that one I gave him, nevertheless the information in there is the same as the information in the other catalogue, the smaller catalogue, regarding the Durant insulation pipe.

Q. I am showing you Plaintiff's Exhibit No. 28.

Will you describe what that is please? A. Yes.
278 That is our insulation manual that shows the various
types of insulation we manufacture and the thicknesses of the insulation and other engineering data in the back of it.

Q. Will you please refer to the portions of the manual, Exhibit No. 28 of Plaintiff, as to what you exhibited to Mr. Crockett? A. Yes. I showed him the Ehret Durant insulated pipe.

Q. Now, what page is that, sir, in this catalogue? A. Sheet DP 301 to Sheet No. DP 308 inclusive.

Q. Those are the pages you showed to him? A. Yes.

Q. Now, would you mind describing on Page—what is the first? A. 301.

Q. Would you mind describing as to what is on Page 301?

Did you exhibit that to Mr. Crockett? A. Yes, oh, yes; he saw it.

I think he saw the entire catalogue, because we went through it.

Q. Now, at that time did you also show him Page 302? A. Of course, I showed him that in showing him the rest of the catalogue, and I explained to him what work he was to do and what work we were to do, and I explained to him—

Q. (interposing) What was the explanation of what he was to do and what work you were to do?

Mr. Hilland: If your Honor please, I submit this is not admissible; conversation about what he said he was to do and what he said Mr. Crockett was to do.

We have a contract covering that.

279 The Court: I sustain the objection.

Mr. Hilland: Sir?

The Court: I say: I sustain the objection.

By Mr. Fitzgerald:

Q. Now, Mr. Droba, did you call attention at that time of Mr. Crockett, or any of his men, as to the nature and construction of the Durant system? A. Yes.

Mr. Hilland: I object. I understand your Honor has just sustained that objection.

Mr. Fitzgerald: That is not the point.

The point that you objected to and his Honor ruled on—

Mr. Hilland (interposing): Yes; that is true.

Mr. Fitzgerald: Will you read the question?

The Reporter (reading):

"Q. Now, Mr. Droba, did you call attention at that time of Mr. Crockett, or any of his men, as to the nature and construction of the Durant system?"

The Witness: Yes, I did.

By Mr. Fitzgerald:

Q. What did you call to his attention? A. I told him at the time that we would furnish—

Mr. Hilland (interposing): Now, I object.

The Witness (continuing): The type specified.

The Court: Yes. I sustain the objection.

Mr. Fitzgerald: Repeat the question.

The Reporter (reading):

"Q. What did you call to his attention?"

By Mr. Fitzgerald:

280 Q. You attempted to answer that. You did not answer it the way the question was asked. A. I called his attention to the construction of the conduit, the way it was made up.

Q. What did you explain to him as to how it was made up? A. I told him that the pipe was insulated with the necessary thicknesses of magnesia, with the outer casing, that the outer casing was then formed around it.

Q. By the "outer casing" what did you mean by the "outer casing"? A. The fiber jacket there (indicating).

Q. Will you point it out? A. Yes.

The pipe is laid in a rack first. The insulation is applied to the pipe and the outer casing is applied over the insulation with approximately one inch air space between the insulation and the outer casing.

The ends are then sealed and spaced and hot asphalt is poured into the casing through the pour holes at the top of the casing.

Q. That comes from the factory in that fashion? A. Yes; when that has cooled sufficiently, it is shipped to the project.

Q. Did you explain to him at that time as to how the material would be when it was shipped to the site? A. Yes.

Q. And what was that? A. I told him when it arrived at the job the ends would be exposed and they would be,
281 after he had welded the pipe we would seal those ends.

Q. Did you call his attention at that time to the fact, with reference to the insulation—

Mr. Hilland (interposing): I object to the form of the question.

Mr. Fitzgerald: I withdraw that.

By Mr. Fitzgerald:

Q. What did you advise him at that time or at any time regarding the insulation material and also the waterproof material? A. Well, outside of the fact that the ends would be exposed when the material was delivered to the job, I do not know as I advised him of anything.

Q. Well, now did there come a time that the materials were actually delivered on the job? A. Yes.

Q. About when did that start, if you recall? A. I don't know.

I believe that is in the records some time in 1942.

Q. You have no reason to dispute the time? A. No, there is no question about that.

Q. When that arrived were you on the site and in Washington? A. Yes; I was in Washington when it arrived.

Q. At the War College? A. No, not at the War College; I was at my office when it arrived in Washington.

Q. Did there come a time when you got down there after it arrived? A. Yes.

282 Q. And why did you go down there? A. Because shortly after it had been delivered to the job, I believe, Mr. Crockett called me and told me that the material had been rejected.

Q. Now, do you recall what the extent of the material, in loads or quantity, was? A. I believe it was the first load delivered to the job.

Q. And do you know as to how much, approximately, material was on the first load? A. No, I do not. There was a truck load.

Q. Now, how did that come to the site?

You stated that it was delivered at the site of the job; how did it come to the site? A. It came to the site by truck in approximately eighteen to twent-three foot lengths.

Q. Was that exposed on each end when delivered? A. Oh, yes; just as it shows in our catalogue.

Q. Do you recall what kind of pipe it was when it was delivered? A. No. It may have been steel or wrought iron; I do not remember which.

Q. Was it eight inch pipe or four inch pipe? A. I do not know that, but I have no reason to dispute what has been testified to as to sizes.

Q. Now, in this project there went four inch pipe and eight inch pipe, did not it? A. Yes.

Q. So, then, the fact whether it was four inch or eight
inch makes no difference? A. Well, no. There were
283 both to start at the boiler house, I believe, and four
inch is the return line.

Q. Is that at the boiler place? A. I believe so.

Q. You say you were called down because the pipe was rejected? A. Yes.

Q. Was Mr. Crockett there himself? A. I believe Mr. Daniels was there; I do not recall Mr. Crockett's presence there.

Q. Did you talk with anyone there when you arrived? A. Yes, I talked with Mr. Suter and I believe I talked with Mr. Daniels and was told that that—well, Mr. Suter knew our pipe, that is, our conduit, as a metal-jacketed duPont but, due to Government regulations and a new ruling by, I believe, the Army, Navy and Munitions Board, they said they did not want sheet metal conduit, that is, conduit encased in sheet metal inasmuch as in any Government job, due to conservation they did not want it.

Q. That means that this tube here, this fiber material end or proposition, would have been steel or better? A. It would have been twenty-six gauge sheet metal.

We were not allowed to use that because the War Production Board, not necessarily the War Production Board, but the Army, Navy and Munitions Board, ruled we were not to use it.

So we had substituted this one-fourth inch thick casing, and had had it approved at First and Douglas Streets by the United States Engineers; they had approved the substitution of the twenty-six gauge sheet metal with the one-quarter inch thick fiber jacket.

284 But, at the time, I do not believe Mr. Suter knew of the substitution, and when he saw it was fiber instead of sheet metal, he rejected it.

Q. Did Mr. Crockett know that you had made arrangements with the Army Engineers at First and Douglas Streets, under the reasons or for the reasons you have stated, to make the change? A. Yes; Mr. Crockett knew about that.

Q. Did he make any objection to that at all? A. Not that I recall.

Q. Now, can you describe as to the purposes used by that metal jacket or the fiber jacket that is used now? A. Well, the only purpose for the metal or fiber jacekt is to act as a mold to hold the asphalt that we pour in between the jacket and the insulation until it sets, and to protect that asphalt during shipment and while it is being installed in the ground; that is, keep it from breaking.

Q. Now, the purpose for that is, therefore, to secure the asphalt from being injured? A. Yes, prevent it from being injured.

Q. Now, after that was installed into the ground, with the fiber jacket or the steel jacket, would it have any further utility for protection? A. No, no. Once that is in the ground and the ground is back filled, the earth forms a casing of its own around it and it does not make any difference whether the sheet metal or fiber remains in place any length of time or not, because our waterproofing will protect the insulation.

Q. When you were called down at that time and spoke to
Mr. Suter with reference to the alleged rejection in
285 the first material, what was done concerning that and
what did you find wrong with the material that you
examined? A. Well, the only thing I found which was—
well, it was not wrong; it did not make much difference.

* * * * * * * * * *

Mr. Fitzgerald: Will you read that last question again?

The Reporter (reading):

"Q. When you were called down at that time and spoke to Mr. Suter with reference to the alleged rejection in the first material, what was done concerning that and what did you find wrong with the material that you examined?

286 The Witness: Well, as you can see, this jacket, the fiber jacket, is applied in laminations, that is, it is spirally wound until it reaches a thickness of approximately one-quarter of an inch.

What happened there is approximately what you see here (indicating). The outer lamination had been torn in some cases and the other material was showing through, that is, the balance of the laminations.

It was not the outer casing that is waterproof—you see on the outer casing it had been ripped off, as you see it here (indicating).

This (indicating) is where the waterproofing that had been applied to the outer lamination soaked down to the one below, but that did not make any difference because there was enough of that on there.

By Mr. Fitzgerald:

Q. Enough of what? A. Enough of the jacket remained. That is the same effect, has the same effect; the outer lamination had been torn, not completely off, but probably in unloading it was torn a little bit, and it did not make any difference. It was still there.

Q. So, was there any defect at all in the waterproofing and the insulation? A. No, none whatever.

Q. I see. Now, then, what was done after Mr. Suter had rejected that?

Did he reject it on the grounds you have indicated
287 now? A. Yes; those were the grounds as I stated. However, Mr. Goddard—

Q. (interposing) Then, what was done? A. Well, I don't know exactly what was done at the field. I either called Mr. Goddard or he called me regarding this condition and he—well, it was understood at the time that that was the only thing that had caused the rejection, and Mr. Goddard, I believe, notified Mr. Vandersluis who is, as I understand it, the chief inspector at the Army War College, that if that was all there was wrong with it it was perfectly all right.

Q. Now, was Mr. Vandersluis the chief inspector at that time? A. Yes.

Q. And located at the War College? A. Yes.

Q. And did you have any conversation with Mr. Vandersluis in the presence of Mr. Crockett or in the presence of Mr. Suter, or one of Mr. Goddard's workmen down there, or superintendent, concerning that particular item of rejection? A. Well, I think that settles the rejection.

Mr. Vandersluis was notified that that being all that was wrong with it he should approve it, and it was approved and it went into the job.

Q. Now, do you recall at any other time during this whole operation that any other material that was delivered, other than what you had testified to, had been rejected or had been objected to by any other inspectors? A. No; that was the only objection that ever was called to my attention. 288

Q. So that all the other material, or materials, that went into this job had been inspected by the United States inspectors and not rejected, except as you have indicated? A. That is true. They were always on hand when a load of material came in, to measure the length—I believe that they did that together with inspecting the appearance of the material, and I do not know of any other rejection for any reason.

Q. So that every bit of material that went in there was O.K.ed by the inspectors? A. That is true.

Q. Now, Mr. Droba, how frequently did you visit this job while it was in progress? A. Well, I was on the job practically every day from the time that I had my first workmen there, and prior to that time I believe I visited two or three or probably four times.

Q. Now, when you first went down there and they began to lay the pipe, that is Crockett's men, would you point out on the chart there where it started, where they started to lay it? A. (indicating on the chart) From the boiler house to the first L is where they started to lay their material.

Q. That was laid on the ground, was it? A. It is twenty feet, I think, there.

Q. What was the size of that pipe? A. I believe there it is eight inches long and four inches long in there—I believe they laid the four inch first.

The four inch was a return line.

Q. Do you recall the condition of your pipe at that time when it was in the trench?

289 Was it in the trench? A. Yes, it was in the trench.

Q. Was the trench open? A. The trench was open.

Q. And that was repaired by whom; that trench? A. The Crockett Engineering Company.

Q. And will you describe as to what you found there with reference to the laying in the trench? A. Well, just along in the bottom of the trench, as it should have been, and his men were working on it, that is, join the ends of the pipe together so that they could be welded.

Q. After you visited the place again, what else did you find that they had done with reference to the material laid in the trench, the progress? A. They had laid more of it. They worked from here on to the first L (indicating on the plat) and then they worked over to—that (indicating) is the paint shop there; they worked about to that point (indicating).

Q. Do you recall what particular time of the year that was? A. That was about June, I guess.

Q. Do you know whether it was the early part? A. The early part of the year; that is the early part of the summer.

Q. Or early or latter part of June? A. I believe the latter part of June.

Q. How much pipe, do you recall, had been laid by the plaintiff on June 30, 1942?

Do you remember—A. (interposing) No, I don't.

290 The records indicate that, I believe.

Q. Now, around July 3rd, do you recall how much pipe was laid there? A. No, I do not associate any laying or amounts of laying pipe with the date. That is some time ago, but the records indicate exactly how much they had done, I believe.

Q. Now, did there come a time, do you recall, about when —strike that out.

Did you have any conversation at all with Mr. Crockett or Mr. Crockett's men concerning the matter of it being in the trench, exposed to the weather?

Mr. Hilland: I object to the form of the question, if your Honor please.

He is definitely leading the witness.

The Court: Well, I overrule the objection.

Answer the question.

The Witness: Well, the first time I called—

Mr. Hilland (interposing): And may we have the time and place fixed, then?

The Witness: That was before the first pipe had been laid into the trench.

By Mr. Fitzgerald:

Q. What trench do you mean? A. Any trench.

Q. Any trench? A. Yes. That was right after the first load was delivered; I believe it was that day or the following day.

We had a rain.

291 I called Mr. Crockett and told him that something should be done to protect the ends of the Durant, the exposed Durant, and also the fiber sleeves.

Mr. Hilland: Now, if your Honor please, they have nothing about that in their answer.

Mr. Fitzgerald: Oh, yes!

Mr. Hilland: They have not alleged that this duty was on us to protect the ends of the pipe. There is no allegation in the answer —

Mr. Fitzgerald (interposing): We allege they failed in their duty to—

The Court (interposing): He cannot testify as to whose duty it was.

Mr. Fitzgerald: No. But he can testify to what he told Crockett.

Mr. Hilland: You have not alleged it is our duty.

The Court: What's that?

Mr. Hilland: They have not alleged it was our duty. There is no allegation that the duty was ours.

The Court: I understand their contention is that it was not their duty.

Mr. Hilland: Right.

The Court: Well, I overrule the objection.

The Witness: I notified Mr. Crockett that the ends should be protected, and that the sleeve, the fiber sleeves that are delivered with each load to make up the joints should also be protected.

So, the next time I got to the job, maybe the following day, the ends had been protected. Tar paper had been laid over the load and, I believe— 292

By Mr. Fitzgerald:

Q. (interposing) Did you say tar paper? A. Yes.

Q. Laid over the whole—A. (interposing) Over the load that had been delivered and was lying in the field.

Q. That was before it was laid in the trenches? A. Yes; that is when the first load was delivered, and I saw it would get wet.

Q. Did you explain to him why you wanted it covered? A. Oh, yes. I told him that I did not want any water to get into the magnesium because then it would mean that we had to wait until the magnesium dried before the joints could be made.

Q. Did you explain to him at all as to what water would do to the magnesium? A. I told him water would soak into the magnesium and wet it and it would not be any good until it was dried out again.

Q. Now, did there come a time when they began to lay the stuff in the trenches as it progressed along?

Will you describe up there, if you will please, (indicating the chart on the blackboard) as to what was done, beginning with the boiler house and all the way down? A. You mean the course of the excavation?

Q. That is right. A. (demonstrating on the blackboard) It started here (indicating) at the boiler house and it went to the first L and running along to Loop 1, and down here to a trap and anchor, just before it hit the road across the
road to loop 2 and the manhole X; and from manhole
293 X under a passageway back and to building 55B, and
then beyond that to another loop, then to—I don't
recall whether there is a trap there at that paint house, at that point—yes, the drawing shows a trap and anchor; that may have been changed, but I don't know. Then, from there you went to another expansion (indicating) and then across another road to an anchor and manhole, and then all around.

Q. Do you recall this—

The Court (interposing): Well, let the jurors be excused until half past one.

(Thereupon at 12:27 o'clock p.m. the members of the jury left the court room and the following occurred in their absence.)

The Court: Mr. Hilland, I have not quite understood what your contentions are.

Do you contend that this material was defective when it was delivered?

Mr. Hilland: In the respects testified by Mr. Suter.

The Court: Now, where in your complaint do you set forth that, that the materials were defective when delivered?

Mr. Hilland: I do not believe we do, your Honor; I do not believe it is—

The Court (interposing): I have not found it.

Mr. Hilland: No, I do not believe it is in there.

The Court: Then, what is your contention? That by reason of the failure of the defendants to properly protect it—

Mr. Hilland (interposing): That is only part of it.

As we understand it, merely wetting or getting moisture in the magnesium does not affect its insulating qualities. Its insulating qualities can be destroyed and de-
294 teriorated and damaged only when they seal moisture in it. That steam has to get out. It breaks the insulation and waterproofing and then when the heat escapes through there it melts the waterproofing and that runs down on the pipe.

The Court: Then it is the manner of insulation or, I should say, installation that you rely on.

Mr. Hilland: Yes. You remember Mr. Ecton's testimony—

The Court (interposing): I am trying to connect the testimony with the complaint; that is my difficulty.

Mr. Hilland: You remember Mr. Ecton's testimony * * *

The Court: I will not rule on it yet.

* * * * * * * * * *

295 Direct Examination (resumed)

By Mr. Fitzgerald:

Q. Now, Mr. Droba, when you explained to Mr. Crockett that this magnesia got wet or if it got wet I should say what damage would ensue to the magnesia, what did you tell him would be the damage caused to the magnesia if it became wet?

Mr. Hilland: I think he ought to fix the time and place of this conversation.

The Witness: I—

Mr. Fitzgerald (interposing): I am speaking of the time of the delivery there and the installation made by Mr. Crockett's men around the boiler house.

Mr. Hilland: All I want to know is when and where he said he had the conversation.

Mr. Fitzgerald: He said he had the conversation with Mr. Crockett when a lot of material was exposed on the lot.

The Witness: After it became wet. I think every-
296 body knew that or knows that.

The Court: That is not the question.

The Witness: Will you repeat the question?

The Reporter (reading):

"Q. Now, Mr. Droba, when you explained to Mr. Crockett that this magnesia got wet or if it got wet I should say what damage would ensue to the magnesia, what did you tell him would be the damage caused to the magnesia if it became wet?"

The Witness: I told him that magnesium, would, when wet is no longer an insulator and it could not be an insulator until it gets dry again.

By Mr. Fitzgerald:

Q. Now, what did he say to you with reference to—Mr. Crockett say to you with reference to him undertaking to protect the magnesium?

Mr. Hilland: If your Honor please, I submit that is leading. I think he can ask him to—

The Court (interposing): I think he can limit the conversation to something that has some relevancy to the case.

Mr. Hilland: I understood he has asked him to tell the whole conversation.

The Court: Well, the whole conversation may include something about politics or anything else.

He can limit it to the subject of the conversation.

The Witness: Well, when quite a bit of that material became wet out there, and I saw the possibility of it remaining wet for an indefinite time, and then even if it did become dry before the tests were made again and got wet—

297 Mr. Hilland (interposing): That is not responsive to the question.

The Court: No, I think not.

The objection is sustained.

By Mr. Fitzgerald:

Q. After you explained to Mr. Crockett what would happen to the magnesium if it became wet, what if anything did he say to you with reference to him keeping it dry? A. Well, he did not want to do anything about it.

Q. Now, by that do you mean that he stated that he would not do anything about it, or do you mean that was your impression of his attitude? A. Both.

Q. Sir? A. Both. You see my suggestion was—

The Court (interposing): Just answer what did he say?

By Mr. Fitzgerald:

Q. If anything—did he say—A. (interposing) As I recollect he was not going to do anything about it.

Q. And he said that to you? A. Yes.

Q. Now, did there come a time that you remember when the rains came there in July and August? A. Yes.

Q. Were you called down to the site by anyone? A. I was at the site.

Q. You were at the site? A. Yes. I visited the site
every day; I visited the site every day we had been
298 there.

Q. What did you discover with reference to that chart up there, please, concerning the condition along the whole system?

Will you point it out? A. (referring to the chart hereinbefore mentioned) Why, yes.

Well, this (indicating) became wet first, and then, as they laid the pipe and it rained it became wet as far as they went as every time they put pipe in before the test was made it became wet and stayed in that condition.

Q. Now, can you describe as to the condition in the trenches when the rain fell into the trenches? A. Well, the trenches became flooded with water.

Q. And by that you mean the water came up to the top? A. Oh, yes; in a number of cases it overflowed entirely.

Q. Where was the Durant pipe then? A. It was at the bottom of the trench.

Q. Submerged in water? A. Yes.

Q. At that time were there any field joints connected up by your men? A. No. The magnesium had been wet for quite a while and, of course, we could not make any joints while it was wet unless we had vents put in at the joints, had pipe vents. If we had had that done we could have made up all the joints where the line had been tested.

The trench could have been backfilled and the moisture in the piping, that is in the magnesium, would have come out through those vents when the steam was turned on.

299 Q. Was that done? A. No.

Q. What did you suggest to them as to the method to be used in keeping the trenches dry? A. Well, I don't know as I made any suggestion.

It was obvious that water and—

Mr. Hilland (interposing): I object.

He has answered the question.

The Court: Yes.

By Mr. Fitzgerald:

Q. Did the plaintiff, Crockett, start pumping water out of the trenches? A. Yes, he pumped water out of the trenches.

Q. And then did there come a time that the water that was in the trenches finally was drained off by the pump? A. Yes.

Q. And, after the water that was in the trenches had been finally drained off by the pump, what was the condition of the magnesium? A. Oh, it was thoroughly soaked.

Q. Did you make any suggestion to Mr. Crockett or his men, Mr. Crockett or his men as to what method should be used by them concerning the drying out of this pipe? A. At a meeting in Mr. Vandersluis' office, the area inspector, I believe his title was, the question of the wet magnesium was discussed thoroughly, as they were in quite a hurry to get the Durant into the ground and covered, having the trenches backfilled, and the question came up as to what could be done to hurry up the drying out of the magnesium.

It was suggested at the meeting—

300 Q. (interposing) By whom? A. I do not know. It may have been me; it may have been the gentleman that testified just before I did, but somebody there at the meeting certainly thought of it and it was suggested that Mr. Crockett get a portable boiler to the job, hook it up to the steam line and to the return also, I believe, and attempt to dry it out.

At that time I told them that there should not be over a pound or two pounds of steam on the boiler because the excessively high temperature might cause the asphalt to flow.

Now, I did not check the gauges to see what steam went on there, but I did see the asphalt start to flow.

Q. Now, at that time, what area was there in which the pipe was left open at the joint and the pumping was done? A. Well, they started pumping back in here (indicating on the chart) and they pumped all the way down to here (indicating) at one stage or other of the job, during the excessive rains.

Q. Now, when they put this boiler on that you testified to, what area did that boiler heat cover with reference to that? A. I believe it went down to this manhole (indicating) but it might not have gone that far with the temporary boiler; it may have come back to here (indicating) or here (indicating) but, at any rate, they had steam on, either with the temporary boiler or with a boiler at the central plant with the War College, all the way down, in an attempt to dry it out.

Q. And at that time the material joints were exposed when they turned the temporary boiler on? A. Yes.

301 Q. And at that time did any of the asphalt waterproofing flow? A. As I said before, I do not recall whether any asphalt waterproofing flowed at the time they put the emporary boiler on or after the main heating plant was put in operation or the steam from the main heating

plant was introduced into the line, but I did notice that the asphalt had started to flow.

Q. Where did the asphalt flow in to? A. Well, the asphalt flowed into the bottom of the trench from the conduit, from the ends and from the top.

Q. Now, did you notice the condition of the trenches that they built? Were those trenches graded or not graded? A. They were fairly well graded, but the Durant was set up on brick in most cases; that is, there was a brick on each end and possibly in the middle—I do not recall that; but I do know they had brick under it at intervals to maintain their grade end alignment.

Q. Did you make any suggestion in regard to what they should do to protect the pipe from soaking it? A. Yes.

Q. What did you suggest? A. Again I suggested the vents and closing up of the joints, and I also suggested that the trench be backfilled, at least half way up the side of the Durant, say about the entire length of the Durant, so that it would rest on the ground and not be suspended, so that the weight of the asphalt which had softened would sag the casing.

Q. Now, was there sagging in the casing at that time?
A. Well, yes; because it was visible, the asphalt
302 running from the top of the casing allowed the casing
to settle so, as a result, there was probably a half inch of magnesium at the top and in some cases less, and possibly one and a quarter to one and a half at the bottom.

Q. And do you recall when you had made that suggestion to Crockett's men, or to Mr. Crockett, about backfilling, as you have indicated, and putting in vents, how long after that did Mr. Crockett actually fulfill the suggestions you made, both regarding the backfilling and the vents? A. Well, it was quite a while after. I would say it was a couple of weeks or maybe three weeks from the time I first suggested, or the first suggestion was made until they actually did it; it may have been more, because I made the suggestion when we were up at this point (indicating on the plat) working through here (indicating) and the suggestion was not carried out until all this (indicating) was in, and they started putting the vents in here (indicating) after that (indicating) was in.

Q. At that time the rains were there, were they? A. Oh, yes; that was during the period we had the rains.

Q. Did their other backfill, as you had suggested to them—was that put on to the floor of the trench? A. No, they never did do that.

Q. They never backfilled? A. No.

Q. Now, did you make these suggestions to them—

Mr. Hilland (interposing): I think in fairness to our position he ought to be required to fix the time and place and to whom he made the suggestion about backfilling.

Mr. Fitzgerald: I think that is quite proper.

303 By Mr. Fitzgerald:

Q. Do you understand the suggestion? A. Yes. I discussed that with Mr. Daniels, Mr. Crockett's foreman, and with Mr. LeVan who was an inspector from Mr. Vandersluis' office, and I believe with Mr. Vandersluis himself.

Q. Now, by "Mr. Vandersluis"—they were from the Government office, the Government Engineer Inspectors? A. Yes.

Q. What was your purpose—did you undertake—

Mr. Hilland (interposing): I am sorry to interrupt, but I asked not only to whom but when and where; particularly when and where he suggested it to Mr. Daniels.

Mr. Fitzgerald: That will be all right.

By Mr. Fitzgerald:

Q. Will you answer that? A. Well, it was when I first noticed the asphalt coming out, but when that was I cannot put a date on that.

Q. Can you mark where the asphalt was coming out, on the chart, please? A. (indicating on the chart) I saw it coming out along in this section here (indicating).

Q. Was that when the entire system was laid in that area by Mr. Crockett's men? A. Well, I had made the suggestion before that entire system was in.

Q. So they had a condition after you made the suggestion to backfill in order to support the Durant, and they did not do it? A. Yes; they had that condition.

304 Q. Did they backfill? A. No. The only time they backfilled was when the job was ready to backfill, when the joints were made.

Now, earth did get in under some of the conduit due to water washing the backs down into the trench, and they had to take some of it off in order for us to make some of our joints.

Q. You are quite familiar with the manufacture of the Durant system, are you, the length of pipe? A. Yes. I know about how it is done.

Q. Could you describe, if you will, the reason for giving a certain thickness to the asphalt? A. Well, the reason we put on one inch, or poured in about an inch of asphalt, is that there is air between the insulation and the casing as the asphalt is poured in.

Now, we want to get rid of air, of course, because air bubbles forming in the asphalt would not be conducive to good waterproofing.

The reason we put an inch in there is that whatever air bubbles may remain in there will be much too small to do any damage, and we poured that in more than one pouring.

We allow the asphalt to settle after the first pouring and then pour on top of that, so that the asphalt has a fairly uniform thickness all around and the thickness is approximately an inch.

Q. Now, on the other hand, the fact that that—strike that out.

Is there any real material difference excepting what you have described about the air bubbles getting in there as to the durability and thickness of the waterproofing?

305 A. I do not quite follow that.

Q. Is the waterproofing secured as waterproof to prevent water from getting outside in? A. That is correct.

Q. That is the purpose of the asphalt? A. That is the purpose of the asphalt.

Q. Preventing surface water from outside getting into the magnesium? A. That is correct.

Q. Is there any appreciable difference in its waterproofing security whether it is an inch or a half inch in thickness? A. Well, as far as keeping the water out is concerned, one-half inch thickness will keep the water out just as well as the one inch thickness.

Q. So, why do you select one inch instead of a half inch or a quarter of an inch or ten inches? A. As I said before, the reason we selected one inch—that is an arbitrary selection—is to assure whatever air bubbles may be in there, so insure that they could not be large enough to render the waterproofing useless at the point where the air bubbles occur.

Q. That is to prevent the water from getting in? A. That is right.

Q. Mr. Droba, what is meant by "staggering"? A. On insulation, you mean?

Q. Yes, on insulation. A. Well, when more than one thickness of insulation is applied on the pipe, the purpose of the staggering is to eliminate any straight break in the magnesium from the inside of the magnesium to the
306 outside.

A straight line of the insulation comes split, and it is applied to the pipe so that there is a joint on one side and the joint on another.

When the second layer is applied, the joints are staggered, that is, the breaks in the sections of the magnesium are at, well, at a forty-five degree angle from the original break.

Q. Will you explain or describe on this exhibit here, please, just what that is? A. (demonstrating) Yes. The break in this inside section of the magnesium occurs here (indicating) and here (indicating).

Q. Let me interrupt you there.

Can you have, so to speak, a half moon here (indicating) and a half moon there (indicating)? A. That is a half section covered here (indicating) and there (indicating).

Q. So they join together in that fashion (indicating)? A. That is right.

Q. Now, you have an opening there then, a crack, in here (indicating) which is an opening, and one there opposite (indicating)? A. That is right.

Q. What do you mean by "staggering" with reference to that? A. Well, with the break here (indicating) and here (indicating) on the inside section, the break on the outside section should be anywhere, anywhere but at this point (indicating); it should be here (indicating) or here (indicating) or here (indicating) so that heat from the pipe could not radiate directly through this crack into the corresponding crack.

307 If the insulation were applied so that the joints on the outer section were directly in line of it, the heat could not escape through here (indicating) and into the asphalt.

Q. Looking at that exhibit, would you say that that is staggered or not staggered? A. I cannot tell. I would have to take this inside section out and see whether the joint is here (indicating) or there (indicating) or where the joint is on the outside section.

Mr. Fitzgerald: May we do that, your Honor please?

The Court: I beg your pardon?

Mr. Fitzgerald: May we separate this?

The Court: Yes.

Mr. Hilland: Just so that he does not break up our exhibit.

The Witness: It may be difficult to part it.

Mr. Fitzgerald: I will mark where it was (indicating).

The Witness: If you will mark it here (indicating) it will show where the inside section is.

(Mr. Fitzgerald followed the suggestion of the witness.)

The Witness: Can I break that there (indicating) to see where the joint is, whether it is directly opposite?

Mr. Fitzgerald: All right?

Mr. Hilland: All right.

(The witness manipulated the exhibit.)

The Witness: It does not show any joint here (indicating), so the joint must be in here (indicating).

By Mr. Fitzgerald:

Q. Will you break the other side out, please, and see if
there is a joint on the other side? A. (after demon-
308 strating further) No; there is no joint in this mate-
rial here (indicating) no, the joint is evidently in here
indicating).

At least, it is what we call a broken joint, one section of insulation does not have a joint right in the same line with the other.

The break in the inside casing or inside section of insulation is here (indicating) and the break is in the outside insulation somewhere else. It is not directly opposite.

Q. Then, that is staggering? A. Yes, that is staggering.

Q. So, that exhibit there has been actually staggered? A. Yes, sir.

Q. I have forgotten whether you describe the reason—you have?

Mr. Hilland: Yes; I think he did.

The Witness: I believe I did, yes.

Mr. Fitzgerald: You may take the witness.

Cross-Examination.

By Mr. Hilland:

Q. Mr. Droba, did I understand that by looking at the ends of these insulations, the insulation covers, when it is delivered on the job, you cannot tell just by looking at it whether the insulation has been staggered or not and the only way to determine whether the insulation has been staggering is to tear it apart as you have done here? A. No, not necessarily.

If that was a clean break in there, and the end of it was visible, as it is when it arrives to the job, I believe you could tell it, because you could very likely see the break.

309 Q. Well, you just had to tear it apart just now to find out whether or not it was a broken joint or a staggered joint—a broken joint and a staggered joint means the same thing? A. Yes.

Q. You had to tear it apart now to find it out? A. I did not see any break directly opposite the inside break; I do not see it. I do not think it should be there but, in order to prove it was not, I broke it off.

Q. As a matter of fact, when that covering was delivered to the job, with these several deliveries down there, they never did discover at the time of delivery and before installing any of that covering, that it had not been staggered A. No.

Mr. Fitzgerald: Who do you mean?

Mr. Hilland: The inspectors

By Mr. Hilland:

Q. None of the inspectors, no one on the job discovered at the time of delivery and before installing any of that covering that it had not been staggered? A. That it had not been staggered?

Q. Yes. A. It always was staggered.

Q. At the time it was delivered and before it was installed in the trenches did anybody on the job at any time discover any part of that that had not been staggered at the factory? A. No, not that I know of.

Q. Now, as a matter of fact, after failures began to appear in the insulation and waterproofing of this underground system, when they tore that covering off they 310 found that part of the insulation that had been applied at the factory had not been staggered, did they not? A. I did not see it.

Q. Did you go down there and look?

You heard—A. (interposing) I was not invited.

Q. You heard Mr. Ecton's testimony last Thursday? A. Yes.

Q. Were you there when he examined it? A. No.

Q. In the test holes? A. No.

Q. Do you know, as a fact, that they discovered that insulation that had been applied on the pipes at the factory had not been staggered in places? A. No, I do not know that to be a fact.

Q. Well, after the defects appeared what inspection in these test holes did you make personally? A. I do not know that I made any inspection.

I did go down there with Mr. Goddard one day. I think we went to—

By Mr. Fitzgerald:

Q. (interposing) Will you point it out, please? A. I think it was near expansion bend No. 8. I believe that is the one, although it may have been expansion bend No. 6—I do not remember what side of the band stand it was.

Mr. Hilland: Suppose you take your seat again.

The Witness: Thank you.

By Mr. Hilland:

311 Q. A part of the insulation of waterproofing in this fiber coating, the parts that are put on at the factory, are put on lengths of pipe about eighteen or twenty feet in length? A. Yes.

Q. And all except about nine inches at either end of the pipe is covered with the insulation waterproofing, and the fiber cover, at the factory? A. That is true.

Q. So that there would be approximately on an eighteen foot length a little over sixteen feet would be covered?

This whole length of covering would be sixteen feet in one length? A. Yes; probably six inches exceptance.

Q. The pieces of insulation that have been applied inside, how long are they, each of those—they come in what lengths? A. Three foot sections, I believe.

Q. So there would be a long series of sections in that sixteen feet of covering? A. Yes.

Q. And from an inspection of the outside covering when the pipe is delivered on the job, there would be no way in the world for anybody to find out whether or not the insulation within the covering had been staggered, unless you took off the covering.

Is that correct? A. Yes, that is true.

Q. Now, this contract of the defendant's marked "Plaintiff's Exhibit No. 6" provides in the first, second, third,

fourth, fifth paragraph: We will furnish standard
312 weight * * * (reading).

What do the letters "DSBJ" stand for? A. Double Standard Broken Joint.

Q. And that means, in other words, double standard staggered joints—that would be another way of saying it? A. Yes.

Q. So, you actually contracted to sell us staggered joints?

The Court: Now, don't go over it again.

Mr. Hilland: Very well.

By Mr. Hilland:

Q. Now, Mr. Droba, if you will come here again to the blackboard, refer here to manhole F, right at that point (indicating on the chart). A. Yes.

Q. Were you on the job when the pipe was delivered on the job that was laid in trenches, laid in the trenches for manhole F down here (indicating) to the Officers Mess house? A. Was I on the job when it was delivered?

Q. Yes. A. Very likely.

Q. Now, what is the fact of the matter?

Were you? A. I don't remember.

Q. All right, then.

You would not know whether—let me ask you this question: Were you on the job when the pipe was laid in the trenches from manhole F, from manhole F, I should say, to the Mess Hall? A. Yes. I may not have been right at that point, but I was on the job.

313 Q. You were on the job? A. Yes.

Q. But did you see them lay the pipe in the trenches? A. I may or may not be at that section.

Q. Were you on the job when the pipe from manhole F to the steam house was welded? A. Yes, I undoubtedly was.

Q. And were you there when it was tested? A. Very likely, but I was not at the test.

Q. Now, is it not a fact that from the time the pipe was laid in that trench from manhole F to the officers house was delivered on the job, and between that and the time and up to the time and including the time that the field joints in that section were actually laid, you had had no rain and you did have good weather? A. There I don't recall without checking through the reports that Mr. Ecton had.

Q. The reports are here.

Mr. Fitzgerald: The reports are here.

The Witness: The reports show the date the material was in and the condition of the weather.

That is much better than my memory.

By Mr. Hilland:

Q. Now, Mr. Droba, then you take the position that you can neither affirm nor deny that when that pipe was laid and the ends were welded and the field joints put in, the weather was good and the trench was dry, and that cover had never gotten wet.

Is that the position you take?

Mr. Fitzgerald: Just a minute.

314 The Court: I sustain the objection.

By Mr. Hilland:

Q. Well, is it not true that all that pipe was laid, welded, the field joints made in the section I am talking about, when the weather was favorable? A. I told you I don't know. The record will show that.

Q. Now, after a defect occurred in the pipe installation and in the insulation in the waterproofing, is it not a fact that air bubbles or holes within the waterproofing were found as big as that one (indicating on an exhibit)?

Is not that true? A. I was not there when that was taken out of there.

That looks like a stone in there to me, or the result of a stone.

Mr. Fitzgerald: What is the exhibit number, please?

Mr. Hilland: It is Plaintiff's Exhibit No. 26.

By Mr. Hilland:

Q. Now, Mr. Droba, you testified that you made a suggestion to Mr. Daniels and to Mr. LeVan the inspector, and also to Mr. Vandersluis the chief inspector, that there should be a partial backfilling along the Durant system about half way up? A. Yes.

Q. Under it and along the side? A. Yes.

Q. And you further testified that that was never done? A. That is true.

Q. Now, after you made that suggestion or recommendation did your men do any of that backfilling? A. No.

315 Q. Along the line of that suggestion? A. No.

Q. You knew it had not been done by any of the Crockett Engineering Company employees, did you? A. Yes.

Q. And yet when you found they had not done it you did not do anything? A. Our contract was not to backfill.

Mr. Fitzgerald: Just a minute. I object.

The Court: On the ground it is argumentative?

Mr. Hilland: I agree. I am sorry, your Honor.

I get too enthusiastic at times and I try to press it too far.

I am sorry.

Mr. Fitzgerald: We all do.

By Mr. Hilland:

Q. Now, you testified on direct examination also that, after this steam was put on the line for drying out the magnesium you observed that there was a sagging in the casing in certain points? A. That was obvious to anybody.

Q. Did you do anything to correct that condition? A. No, not outside of making suggestions how it should be done.

Mr. Fitzgerald: You have answered the question.

By Mr. Hilland:

Q. Now, after the magnesium insulation gets wet, that does not permanently destroy its insulation qualities, does it? A. That all depends on how long it remains wet.

316 Q. Let me put it this way:

Would that make—let me ask it this way—I will put it this way:

When that magnesium insulation is compressed into blocks at the factory, it is mixed with water, is it? A. Well, it is mixed with water when made, but it is dried out.

Q. And after you compress it into these insulation blocks, that are applied to the pipe, it is dried out? A. Yes, it is dried out.

Q. And after that, if it gets wet again and is dried out, it still has insulation qualities, has it? A. Yes, it still has.

Q. So the fact that this magnesium insulation lay in the trenches and got wet when the whole trench flooded, it was all right to continue to use it if it was allowed to dry out before you made the field joints?

Is that right? A. Provided it had not flattened down.

By Mr. Fitzgerald:

Q. Had not what? A. Had not flattened down.

By Mr. Hilland:

Q. Had any of this flattened down at the time you made your field joints? A. Not that I can see.

All we could see was the end.

Q. When you made your field joints you were satisfied
that the magnesium had been dried out and was ready
317 for the field joints? A. No. We made most of our field
joints with vents in them. Eventually the vents got
in and we made our field joints then.

Q. It was your suggestion to use the vents? A. Yes.

Q. And that was made of one inch pipe? A. Yes.

Q. Welded to the steam line? A. Yes.

Q. So that would run up through the magnesium insulation and through the thickness of waterproofing, outside waterproofing, and then up to the top of the ground?

Is that correct? A. That is true.

Q. Now, if you put seventy-five pound pressure on that steam line, three hundred and twenty degrees Fahrenheit, would not that heat that vent pipe and make it sufficiently hot to melt the waterproofing were it came around that pipe? A. Oh, certainly.

Q. That waterproofing would be about what, two and a half inches from the main steam line, the waterproofing? A. Yes.

Q. So that that metal pipe used as a vent—A. (interposing) Yes—

Q. (interposing) Would have to conduct heat only a distance of about two and a half inches to where it got to the outside waterproofing.

Is that correct? A. That is right.

318 Q. Now, that one inch vent pipe would have, at
that point, about the same temperature as the steam
pipe itself would have, the same temperature, and would not
that vent pipe melt the waterproofing at that point? A. If
the steam was at seventy-five pounds, yes, but it was not.

The steam was at no time at seventy-five pounds as I recall when the vents were put in.

Q. What would prevent that waterproofing from running down along that one inch vent pipe and getting in next to the steam pipe, inside the insulation covering? A. The insulation.

You see, when we put that vent pipe in, we pack magnesium around it.

Q. How do you pack it? A. Pack it in tightly around the pipe.

Q. Then, what did you do to seal that magnesium around that pipe? A. What do you mean seal the magnesium around the pipe?

Q. So that it would be absolutely waterproof. A. Oh, we put— if I follow your question now, we poured asphalt into the opening.

Q. But if the heat from that vent pipe melts that asphalt, what is there to prevent it running down through the insulation next to the pipe? A. The insulation.

Q. Well, the insulation is not liquid proof? A. No, it is not liquid proof—what do you mean by that?

319 Q. It is not liquid or waterproof, it is? A. Well, asphalt will not enter magnesium; it is not like water.

Q. If there is a crack or opening in the magnesium it will go in, won't it? A. We pack it in there tightly. There is no crack.

Q. Now, Mr. Droba—that is all.

Redirect Examination.

By Mr. Fitzgerald:

Q. Mr. Droba, what do you mean by "flattened down" of the insulation? A. Compressing it, causing it to loose its thickness.

Q. And if it loses its thickness, does it have any affect upon its insulation qualities? A. Well, it is not—not being as thick, it does not have the same insulating qualities as a thicker piece.

Q. When you had advised the installation of vents in this line so that when the small power, ten pound, boiler was put on—is that when you advised it, or was it after they had turned the heat on the main boiler? A. Well, it was approximately that time.

It was approximately at the time we had the discussion as to how the insulation could be dried out.

That came along about the same time that the idea about heating the insulation to allow it to dry.

They both should have been done together.

Q. Did you advise them at that time that they should minimize the heat? A. Oh, yes. There was never any intention to put on seventy-five pounds because that is
320 a drying out process and it would be foolish to put more than one or two pounds at the most.

Q. If you put on seventy-five pounds of pressure, what would be the ordinary heating capacity and degrees of the steam in the pipe? A. As Mr. Crockett said, approximately 320 degrees or 330 degrees.

Q. Would that cause the asphalt to melt? A. Yes.

Q. So your reason for suggesting the minimizing of the heat to prevent the asphalt from melting—was that it? A. That is true.

Q. Did they put on extra heat or reduce the heat after you told them? A. As I say, when they had their small boiler on I don't know what heat they had on there, but, as Mr. Daniels said, the boiler would not have gone over five pounds, even that excessive.

When they put the big boiler on again they had a gate valve between the boiler and the steam line and they "cracked" that gate valve and, on a number of occasions, when I looked at the pressure, on the guage, the pressure had gone up to ten and fifteen pounds.

Q. Why did the valve "crack"? A. They "cracked" the gate valve to let some steam in the line. They did not put a pressure reducing valve on to maintain a definite temperature or pressure.

Mr. Fitzgerald: I think that is all.

Mr. Hilland: That is all.

* * * * * * * * * *

321 Thereupon **John B. Vandersluis** was called as a witness for and on behalf of the defendant, and, being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:

Direct Examination

By Mr. Fitzgerald:

Q. Will you please give your full name so that we can all hear you, and your address? A. John B. Vandersluis.

Q. How do you spell it? A. V-a-n-d-e-r-s-l-u-i-s.

Q. And your address is what? A. My address is 101 West Linden Street, Alexandria, Virginia.

Q. Mr. Vandersluis, where are you employed? A. I am employed by the United States District Engineer at Walter Reed Hospital.

Q. Now, the United States Engineers' main office is where, sir? A. At First and Douglas Streets, Northwest.

Q. How long have you been connected with the United States Army Engineers? A. Since—I was transferred to the United States Engineers office on December 16, 1940, from the Construction Division of the Quartermaster Department.

322 Q. And where were you prior to that? A. I was with the United States, with the Construction Division, Quartermaster Corps, from January 14, 1929, as an inspector of construction.

Q. So, then, you have been all these years connected with the construction business as an inspector for the United States? A. That is correct.

Q. What is your present or what are your present duties and your present profession? A. At present I am superintendent of construction, in charge of construction projects for the District Engineer at Walter Reed Hospital.

Q. By the District Engineer you mean the United States Engineers? A. I mean the Corps of Engineers of the United States Army, the United States District Engineer's Office.

Q. Now, in 1942, around about April or May, where were you employed at that time, and what were your duties? A. I was transferred from Bolling Field, District of Columbia, to the Army War College in the District of Columbia on June 3, 1942.

Q. Do you know why you were transferred there? A. I was transferred there to take charge of new construction by or at the Army War College.

Q. Now, in connection with that, the duties or your undertakings there have also to do with the installing of the hot water heat distribution system and boilers to be erected by Mr. Crockett, or the Crockett Engineering Company? A. That is right.

323 Q. And you were acting in that capacity there? A. Yes, sir.

Q. Do you recall, then, Mr. Crockett first began his work, or the Crockett Engineering Company first began their work—and when I say "Mr. Crockett" I mean the Crockett Engineering Company—when did they first begin their work at the Army War College? A. The work being done by the Crockett Engineering Company at the War College was going on at the time I was transferred to the War College.

I do not remember the exact day it was started. However, it is in the record, the exact date is.

Q. I will ask you to look at this chart over here, these maps , if you will come down please, sir, and go to the blackboard and look at those maps, and I will ask you if you recognize them? A. (having left the witness stand and approached the blackboard) Yes. That is the plan of the steam distribution system of the Army War College that the Crockett Engineering Company installed under their contract.

Q. Do you remember where they first began the installation of the material and can you point out the point on the map? A. They started up here (indicating) at the central heating plant. They started from there and worked on down towards the new office building above here, at the Army College.

The Court: Will you speak a little louder, please?

By Mr. Fitzgerald:

Q. Now, were you on the job, Mr. Vandersluis, when the first load of material was delivered by the Ehret 324 Magnesia Manufacturing Company to the job at the Army War College? A. I was at the War College when it was delivered.

Q. Do you recall what date that was? A. No. I would not remember that date.

Q. With reference to June 3rd— A. (interposing) No, I would not remember exactly what date it was without looking at the reports, the daily progress reports.

Q. Now, do you remember what the first load consisted of? A. Yes, I do remember that.

I remember that the first load consisted of four inch insulated pipe units.

Q. And do you recall that there was some objection made as to the material when it was delivered there, by one of your subordinates? A. Mr. Suter, who was the inspector on the job under me came down to my office and told me that this, this pipe, these pipe units that came in were in bad condition, and he recommended they be rejected and asked me to look at them, which I did.

I went up on the job and looked at the pipe units.

It seems that the fiber jacket on the insulation to protect the insulation and the waterproofing on it, was badly torn.

Q. I will ask you to come down here and look at this exhibit and ask you if that is similar, this fiber jacket is similar to the one that you are talking about now. A. (after examining one of the exhibits) Yes, it is.

Q. Will you describe what you found wrong with the material delivered there then? A. Why, this fiber 325 jacket in unloading it had been badly torn and broken through so as to expose the asphalt underneath.

In fact, in unloading the pipe units, they had thrown them off on the ground.

Q. Who was unloading the pipe units? A. Generally, the truckers were.

I do not know who was unloading them.

They were on the ground when I saw them.

Q. So they were damaged when they— A. (interposing) They were damaged when they were unloaded, when they unloaded them, that is right, and the asphalt in some places was exposed.

Q. Now, what did you find out after you examined the material as to its durability and as to its acceptability to the job? A. I did not consider it of any value.

Q. Do you mean that the break was— A. (interposing) I did not consider that the jacket was of any value after it had been badly torn that way, but it was not protecting the asphalt nor the magnesia underneath it.

Q. Did you object to it or reject it? A. No—I rejected it and either told Mr. Crockett or his representative on the job that it was not to be used until I told him to use it.

Q. Was it finally put in there? A. Yes, it was finally put in there.

Q. By whom? A. By the Crockett Engineering Company.

I finally—I finally told them he could put it in.

Q. Now, what was the basis of your telling Mr.
326 Crockett to put that in? A. I went back to my office
and I called up the United States Engineers office at First and Douglas Streets, and spoke to the Mechanical Engineer there, Mr. Goddard, and told him the condition of the pipe units as they had been received on the job, and he told me that the units were all right, they could be installed that way; that after all the fiber jacket on them was merely there to hold the asphalt and the magnesia in place until such time as the pipe was put in the ground, welded and backfilled.

Q. So you came to the conclusion that the fiber jacket that was injured had no material difference, or made no material difference to the durability of it? A. That was the understanding I got from Mr. Goddard, yes.

Q. And do you know in what section of that plant that that material finally went into? A. Yes. That went in between the boiler room and the manhole X.

Q. Would you mind identifying that please, sir? A. (indicating on the chart) Between this boiler house (indicating) and manhole X, which was put in as an extra right here (indicating) at this roadway in here.

Q. Now, you say that material was installed in there by Mr. Crockett's people? A. I did, yes, sir.

Q. And when it got into the trench, excepting the breakage where you have indicated on the jacket, was the material apparently then in good condition? A. As far as I could see, yes, sir.

327 Q. You made an inspection of course of it and passed it? A. No; personally I did not make an inspection of it.

Mr. Suter made an inspection of it. He was the inspector on the job. I had other work there on the post and could not devote all my time to that job.

Q. How frequently, Mr. Vanderslius, were you around the job itself as it progressed? A. Well, I tried to go on the job at least once or twice a day; sometimes it was oftener.

Q. Now, when you were on the job there, once or twice sometimes oftener a day, you would see the material, would you not? A. Oh, yes, I would see the material and go where the men were working and see what they were doing and how they were progressing and how they were doing their work.

Q. And you found that material at that time in good condition, did you? A. Yes, I would say so, as far as—as far as I knew.

As far as I knew the material was in good condition.

Q. Now, did there come a time when the rains came? A. Yes; we had a rainy spell that came up. I do not remember what date, exactly, but it rained severely there and flooded the whole parade ground and the open trench in which this pipe was being laid and was—in fact the pipe was in a great deal of the trench.

Q. Will you describe on the chart there as to just how much of that was in there? A. (indicating on the chart)

Well, I do not remember exactly just how much of it
328 was in, but I do know we had the pipe all through
here (indicating), down here (indicating) I do not know how much down along this parade ground in here (indicating), this being the Post parade ground right in here (indicating), but we had considerable pipe, and I don't know whether it went down beyond the band stand, now, or not.

This whole field here (indicating) was flooded with water, and this trench (indicating) was entirely filled, and we had to pump water there for several days.

Q. By "we" you mean whom? A. I mean the Crockett Engineering Company.

Q. When that became flooded? A. Yes.

Q. Was there any of the Durant material in that trench then? A. Oh, yes.

Q. How much—would you describe on that? A. That is what I saw. I do not remember just how much it was, but it went all the way down here (indicating) somewhere, but whether it went beyond the band stand or not I do not recall, but I do know we had trouble all the way down this line (indicating); I know it was at least to the band stand and beyond.

Q. When you saw that condition, wet and submerged in the manner you have described, did you make any suggestion at all to Mr. Crockett or to anybody? A. What do you mean "make suggestions"?

Q. Well, was anything said between you and Mr. Crockett? A. Oh, yes; it was discussed.

Mr. Fitzgerald: You may sit down again.

The Witness (resuming the witness stand): Thank you.

329 By Mr. Fitzgerald:

Q. You say it was discussed? A. It was discussed, what ought to be done.

Q. And did there come a time that you had a meeting among you gentlemen, Mr. Crockett, Mr. Droba and yourself and some other gentleman connected with your office? A. Yes. There was a meeting held in my office, held there in the War College grounds.

Q. Do you know who was present? A. There was Mr. Crockett, Mr. Droba, Mr. Ecton from the United States Engineers office—

Q. (interposing) That was the gentleman who testified, was it? A. That is correct.

Captain Paul an Area Engineer, Mr. LeVan, the inspector on the job, who relieved Mr. Suter, incidentally, and myself.

Q. Now, what was the general discussion among you gentlemen there regarding this? A. Well, the general discussion at the time, as I recall, was around the drying out of the pipe, these pipe units, so that they could—so that the joints could be insulated and sealed.

Q. Now, what was suggested by whom? A. That is going back too far for me to try to remember what was said by whom and whom said it.

Q. Do you know whether anything was suggested by anyone there with reference to what they should do, and, if so, what was the suggestion? A. Well, it seems to me as I re-
call that—I do not know who suggested that heat
330 should be put on these lines by the Crockett Engi-
neering Company to dry out the insulation before the
joints were insulated and sealed.

Q. Of course, that was after the water was pumped out? A. Oh, yes, that was after the water was pumped out and the insulation had become entirely saturated with water.

Q. What was suggested, what suggestion was made—not by whom, but what suggestion was made to remedy that condition? A. I do not remember whether it was Captain Hall or Mr. Droba or myself, but it was suggested that temporary heat be put on the line in some manner by the Crockett Engineering Company, to dry it out; it had to be dried out.

As it finally turned out, the Crockett Engineering Company did bring in about a ten horse power boiler, brought that down there and tried to put steam on there, which was not large enough, and, later on, the Post Engineer did put fire in the boilers of the power plant, the central heating plant, and the Crockett Engineering Company made a temporary connection, and they kept the steam on the line for about, oh, ten days or so on those lines to dry them out.

At this same conference it seems that Mr. Droba suggested that at the time that the joints were insulated and sealed that the pipe vents be put in from those joints up to the surface of the ground so that any moisture that should be left in the insulation would have a chance to vent itself without breaking down the sealer on the insulation.

Q. Now, was that suggestion made at that meeting you had? A. That was made at that meeting. Mr. Droba made that suggestion, that that was one way of taking care of any moisture that would remain in the pipe units or insulation.

331 Q. How long after that meeting was it that Mr. Crockett installed those vents? A. Well, it was some time; I do not remember exactly when, but there was considerable argument at that meeting, considerable argument, as to who was going to install the vents and who was going to pay for it, and Mr. Droba said he suggested, of course, it was not up to me; and he said it was not up to him—he was not installing the pipe units, but was merely there to see that the pipe units were properly installed and insulated and sealed as called for in the specifications, but that he was not going to put any vent pipes in there.

He felt as though it was up to the Crockett Engineering Company.

Well, the Crockett Engineering Company said that after all they felt it was up to the Ehret Magnesia Manufacturing Company to put the vents in.

And, it was some little time after that before the vents were put in, and I believe, as I recall, that Captain Hall—

I do not know, now, but it seems to me Captain Hall said something about if the Crockett Engineering Company would go ahead and install it, we would take care of them afterwards, or something.

I do not remember now exactly what it was, but anyway the vent pipes were eventually installed by the Crockett Engineering Company.

Q. Was there any heat put on there from the main boiler room? A. Oh, yes, we had heat on at that time; we still had heat on.

332 Q. Now, do you know what the power of the heat was that was on in pounds? A. I do not remember now how many pounds of steam we had on there, but we had plenty. We had at least possibly ten or fifteen pounds of steam, maybe more; I do not recall now, but we had plenty of steam on there.

Q. Was that on the temporary boiler? A. Oh, no, no.

That temporary boiler, it was too small; we could not hardly get any steam up on that at all, not enough for that line.

Q. Was there any time that that heat went on there that it was too high and Mr. Droba suggested reduction of the heat because some damage might be done? A. I do not recall that.

Q. Now, do you recall when the heat was put on from the main boiler that some damage was done? A. What was that question again?

Mr. Fitzgerald: Mr. Middlemiss, will you read the question?

The Reporter (reading):

"Q. Now, do you recall when the heat was put on from the main boiler that some damage was done?"

The Witness: Oh, yes.

You mean after the line was completed?

By Mr. Fitzgerald:

Q. No. I mean—as I understand it, you tried out the ten pound boiler and you abandoned that? A. Yes.

Q. And put on the main steam by connecting with the main boiler house.
333 Is that right? A. Yes.

Q. Now, when that was put on, the main steam from the boiler house, was there any damage done by reason of the heat? A. Not to my recollection. There may have been but I do not recall.

Q. Did any asphalt flow out of any place at all? A. No. The asphalt—no, the asphalt did not run out.

I remember now what you mean—yes.

What happened was that there was considerable moisture still in the insulation which killed the insulation's value, the insulation value of the magnesia and that transmitted the heat through to the asphalt layer. That melted and ran down the sides into the bottom and Mr. Droba called my attention to it one day when I was up there on the job, and also the contractor's man, Daniels, that was installing this pipe and I told him and suggested to him that he backfill around the pipe units more, or higher, to prevent that asphalt from running to the bottom, running down to the sides and bottom of the pipe, as it was doing.

Speaking of damage, that is the damage that was done; yes.

Q. What do you mean by "backfill"? A. Backfill with earth around the pipe united.

Q. For what purpose? A. To hold the asphalt in place; keep it from running.

Q. Was that ever done? A. Yes, that was done.

Q. How long after that? A. Well, I think, as I recall, Daniels had a couple of men do it right away. Pos-
334 sibly—as to how much he did, I don't recall now, but they could not do it, much of it, because a great many of the joints were not made up yet.

Q. You mean the joints not being made up by the Ehret people? A. That is right.

Q. The sealing of the joints? A. Yes, the insulating and sealing of the joint.

Q. The sealing of the joints in the field? A. Yes.

Q. Do you remember how many were left open? A. No, no; I do not recall.

Q. Now, after that meeting, and after the work was done as suggested, did the rains come again? A. Yes. We had several severe rains.

Q. And did the Durant system also again become submerged in water? A. Yes, it did.

Q. What protection was given to that by the Crockett Engineering Company? A. Well, it was not—there was not—there was no protection that he could give it.

Q. Well, did he go along and seal up and put down his pipe? A. Oh, yes. He got caught with the pipe in the ground there with the joints open and not sealed. I do know that Daniels tried to seal up the joints on some of the pipe units with waterproofing compound, temporarily, until such time as the pipes had been tested out, and then
335 that they could insulate and seal the joints.

Do you know how many of these lengths of pipe were laid and how many broken open joints were in that line? A. No, I would not remember it.

Q. You do not remember at all? A. No, I would not remember it.

Most of the—most of the—most of the pipe that was in the ground that was damaged by rain was between manhole A and manhole G, I believe it was.

After we left manhole G, that is going down to building T-5, that is the Army Ground Forces office building, we had fairly good weather from there on down, that is, until we finished the main line, but most of the damage was done in between—did I say between A and G? As I recall, that is on the main line.

Q. Sir? A. As I recall, that is on the main line.

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Cross-Examination

By Mr. Hilland:

Q. Mr. Vandersluis, after Mr. Suter rejected that first load of pipe that was delivered, and you conferred with Mr. Goddard, and then told Mr. Crockett or his representative on the job to install it in the trench, was not there a mere provisional acceptance of that pipe covering and insulation? That is, was it not accepted subject to contract requirements and the requirements of the specifications? A. Oh, yes, certainly. All material is accepted that way, subject to the requirements of the specifications. 336

Mr. Hilland: That is all.

* * * * * * * * * *

336 Thereupon **John Hartley** was called as a witness for and on behalf of the defendant, and being then and there duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified as follows:

Direct Examination

By Mr. Fitzgerald:

Q. Your name is John Hartley? A. Yes, sir.

Q. Have you any initial? A. H.

337 Q. Where do you live, Mr. Hartley? A. I live in York, Pennsylvania.

Q. Where? A. York, Pennsylvania.

Q. Who are you employed with? A. I am employed by Ehret Magnesia Manufacturing Company.

Q. Talk louder and speak so that the jury can hear you, will you? A. Yes.

Q. And they are the defendants in this case? A. Yes.

Q. How long have you been working for them? A. About seven years.

Q. And in that connection your duties have been what? A. Mostly superintendent on the job of insulation jobs.

Mr. Fitzgerald: You will have to speak louder.

The Court: Speak up louder so we can all hear you.

The Witness: Yes, sir.

By Mr. Fitzgerald:

Q. Do you remember when the work was done down at the War College in this city? A. Yes, sir.

Q. How long were you here in Washington when the work was done at the War College in Washington? A. I was here about two years.

Q. And was that all that time before you went down to the War College? A. Yes, sir.

Q. Where were you employed before you went to the War College? A. Right now I cannot hardly tell you that.

338 Q. How long were you employed down at the War College for the defendant? A. As near as I can tell you, about two months.

Q. And when did you arrive on that job, Mr. Hartley? A. Well, that is not very clear to me. I would not just like to say or not; I have no record of it.

Q. You have no record of that? A. No, sir, I do not.

Q. Do you recall whether it was June, 1942, or when? A. Well it was around that time.

Q. June, 1942? A. Yes.

Q. Now, what was your position with the Ehret Magnesia Manufacturing Company down at the War College? A. I was supposed to be superintendent of the job.

Q. And by "superintendent of the job" what do you mean? A. Well, take care of the men they have on the job, give them what they are supposed to do so that it is done right, and—

Q. (interposing) See that it is done right? A. That is right.

Q. Now, when you arrived on the job at the War College had there been any material delivered there by your company? A. Yes, sir.

Q. When you first landed there, where did you find the material? A. The first material I seen was in the ditch right around the boiler room.

Q. Now, here (indicating) is a chart. If you will come
down here please—do you know anything about this
339 chart at all? A. (having left the witness stand and
approached the chart on the blackboard) Yes, some
of it.

Q. Where, on the chart, is the boiler room, if you know? A. Up here, I think (indicating).

The Court: I do not think all the jurors can see it.

You are in the way, Mr. Fitzgerald.

Mr. Fitzgerald: I beg your pardon. I am sorry.

By Mr. Fitzgerald:

Q. Will you point that out? A. The boiler room is up in here somewhere (indicating) and here (indicating) is the power house.

That is not very clear.

Q. Well, was any of the material in any trenches at all? A. Yes, sir.

Q. Can you tell us about how much of the material was in the trenches? A. As near as I can recall, the material was at about this distance (indicating) when I got there.

Q. From the boiler house to the left? A. Yes.

Q. Do you know how many feet that was? A. I guess about two hundred and fifty feet.

Q. Now, at that time—you may take your seat.

Were there any open joints at that time? A. (having returned to the witness stand) Yes, sir.

Q. About how many open joints were there? A. That is hard to tell you.

Q. I cannot hear you. A. I say: That is hard to tell
you.
340 Q. You would not know? A. No, sir, I would not
know offhand.

Q. It comes in twenty foot lengths does it not? A. It comes in twenty foot lengths, yes, sir.

Q. And you have to divide your twenty feet into the number of openings? A. Yes.

Q. Now, what was the condition—strike that out, please.

Was there any material around the ground there, not in the trench? A. There was some material up by the playground it was not in the trench.

Q. By the playground— A. (interposing) By the parade ground.

Q. By the parade ground? A. Yes.

Q. Where was that lying? A. That was lying close to the side of the ditch.

Q. And, by "the ditch" you mean the trench dug by the plaintiff? A. The trench, yes.

Q. Did you make any examination both of the material that was near the parade band stand or playground, and the material that was in the trench around the boiler room? A. Oh, yes, yes, sir.

Q. Now, what was the condition of the Durant material then? A. What was laying outside the ditch by the playground was O. K.

341 Q. Yes. A. That was not wet.

Q. What? A. That was not wet.

Q. Now, was the material lying in the ditch up around the boiler room—what condition was that in? A. Well, that was wet in there for quite a few inches.

Q. I do not understand you. A. That was wet in there for quite a few inches.

Q. Do you know the reason for it being wet? A. Yes. There was water in the ditch.

Q. And how much water was in the ditch? A. Well, there was not so very much in when I got there.

Q. About a few inches, do you mean?

Do you mean a few inches at each one of the openings? A. Yes.

Q. Or of the pipe in any particular section? A. There is supposed to be a pocket under each joint; each pocket had a little water underneath it, some of it as high as the magnesia—the magnesia was so that it seeped right in.

Q. Were you alone on the job or was someone with you? A. The first day I was alone.

Q. Did you talk with Mr. Crockett or Crockett's men on the job about the material? A. No, I did not talk to either one of them the first time.

Q. So the material, then, it had not been tested as yet? A. It had not been tested.

Q. Do you know, when it was first tested, as to how far down on that chart it was when you first tested it?

What do you mean by tested? A. Tested—they
342 put a tester there for leaks.

Q. Leaks in what? A. That is any leak in the joint anywhere that they had not welded.

Q. You mean by that the pipe as distinguished from the insulation? A. Yes, pipe leaks.

Q. Now, tell me, how far down that material was in the trench, if you can tell me, before it was tested? A. Down to a manhole right in here (indicating).

Right in here (indicating) you have a manhole.

Q. About how far distant would that be from the boiler house in feet? A. As close as I can tell you, about one hundred and eighty feet; something like that.

Q. Did they have any more material in there beyond that point? A. Yes, sir.

Q. How far down was that material? A. That material was down about very close to the parade ground.

Q. Point to that, please. A. (indicating) That starts right in about here (indicating).

Q. By the "parade ground" you mean the vacant space below the line? A. Yes.

Q. Is that the parade ground? A. Yes, here (indicating).

343 Q. About how far distant—how many feet long
was that material at the playground or parade ground? A. From the playground—

Q. (interposing) From the boiler room to the parade ground. A. I would say at least two hundred and fifty feet or better, out to the parade ground.

Q. What was the condition of the pipe and the—you may take your seat—and the insulation material at that time? A. (having returned to the witness stand) At that time it was all wet.

Q. What was the cause of it being wet? A. Rain—water in the ditch.

Q. Now, did the plaintiff, that is, the Crockett Engineering Company, or anyone for them want you to seal the joints up? A. They wanted me to seal them, yes, sir.

Q. What? A. They wanted me to seal them.

Q. And why did not you seal them? A. It was not my orders. My orders were not to seal any wet joints.

Q. Not to seal what? A. Not to seal any wet joints.

Q. Did there come a time when more material was put into the trench along that area there (indicating)? A. Yes sir.

Q. Then what was the condition of that? A. Well, when it first went in, it was all right; but right after it was in it was rain and the ditch was filled with water.

Q. Up to the time they made that first test, to see that the metal pipe itself was welded properly, how far was that test made and what action was taken? A. That test was made out to the first manhole.

Q. And what was the nature of the test that was made, and how was it made? A. I think that was an air test, if I remember rightly.

Q. An air test? A. An air test.

Q. Do you remember them putting a water test on there? A. I do not remember.

Q. Now, what was the condition of material after they made this test?

Was it wet or dry? A. It was wet.

Q. And did there come a time that it became dry? A. Yes; a few days after that I had done a few of the joints—

Q. (interposing) And by "done a few of the joints" what do you mean? A. Right in front of the boiler house.

Q. And those joints were dry? A. Those joints were O. K.

Q. What? A. Those joints were O. K.

Q. By that you mean dry? A. Yes, sir.

Q. Now, when this other material became submerged in the water, how far—on the chart there, will you point—
did it extend in the ditch, unsealed? A. Well, I will
345 say at what time this far back (indicating) up to
the corner, and later on clean up through here is wet
(indicating).

Q. And did you seal any of those joints there? A. No, sir.

Q. Why? A. They were wet.

Q. Did there come a time when they attempted to dry that out? A. They tried to dry it out, yes, sir.

Q. How did they try to dry it out, and by "they" who do you mean? A. Mr. Crockett.

Q. The Crockett Engineering Company? A. Yes, sir.

Q. How did they try to dry that? A. They turned steam on.

Q. And then what happened or what appeared after the steam was turned on, if you recall? A. Well, they turned steam on and the asphalt started to get too hot from the top and it started to leave the top.

Q. The asphalt got hot? A. Yes.

Q. And started to leave the top? A. Yes.

Q. What do you mean by "the top"? A. The top of the pipe; it started to go off the top of the pipe.

Q. Was there anything said at that time by you
346 or anybody connected with your firm, the defendant,
as to that condition? A. Mr. Droba took care of that;
he was supposed to take care of that and he took it up, I
understand, with Mr. Crockett.

Q. You don't know anything about that? A. I do not know anything about that.

Q. Now, did you have very many men on that job? A. Well, I had as high as twelve men on that job.

Q. I cannot understand you. A. I say I had as high as twelve men on that job.

Q. I mean before the place was dried out. A. No, sir; only one or two of us.

Q. Why did not you have enough men on there— A. (interposing) There were no joints dry enough to work.

Q. Now, when the material was delivered, as the job progressed, before it was laid in the trench, did you have any occasion to examine the Durant material that was delivered? A. Yes, sir. I had. Quite a few loads came down there that I looked over.

Q. Now, did you notice the condition of the material that was delivered at the job with reference to exposure at each end? A. It was O. K. when it came on the job.

Q. Now, did you examine much of that material? A. Yes. I examined quite a bit of it.

Q. Do you know what is meant by "staggering"? A. Yes.

Q. What is meant by "staggering"? A. Staggering—put your joints opposite—

Q. (interposing) Just a second.

347 Come down and explain that, please, sir. A. (having left the witness stand) There is a staggering joint (indicating on the exhibit).

Q. What do you mean by "a staggering joint"? A. It was a joint up here, and you have the other joints on the side here, see (indicating).

This is a staggering joint.

If this joint was up here (indicating) it would be the same thing.

Q. There is a crack in here (indicating); do you see that? A. That is a joint.

Q. That is a joint? A. Yes.

Q. And those two joints come together like that (indicating)? A. That is right.

Q. And then you have another material that is the same—magnesia is put around that again? A. Yes, sir.

Q. And by staggering you mean what? A. I mean place one joint on the side and one on the bottom and top and one on the side.

Q. So they would overlap—is that a fact? A. Yes; they would.

Q. The material that you saw coming from the factory, was that staggered or not staggered? A. That was staggered.

Q. Do you know whether or not there was any backfilling done to the material by Mr. Crockett's men? A. Not that I recall.

348 Q. Do you remember anyone in your presence suggesting to Mr. Crockett that it be backfilled in order to hold it up, to prevent sagging?

Mr. Hilland: I object to the question.

The Court: The objection is sustained.

Mr. Fitzgerald: I had the same trouble with him. I am sorry.

By Mr. Fitzgerald:

Q. Were you present at any time anyone made a suggestion with reference to backfilling? A. I was present when Mr. Droba made the suggestion to Mr. Daniels, one of the Crockett Company workers.

Q. What suggestion was made? A. His suggestion was that it be filled up and tamped in around the pipe.

Q. What was the purpose of the backfill? A. To keep the asphalt from going off the top.

Q. Was that done? A. It was not.

Q. Was it ever done to your mind or recollection? A. No. sir.

Q. Now, did there come a time when you went off that job? A. Yes, I have been off that job quite a few times.

Q. Why? A. Lack of work.

Q. What? A. Lack of work.

Q. And by "lack of work" what do you mean by that, sir? A. Nothing ready that I could go ahead; no dry joints, and I could not go ahead.

349 Q. And you left the job? A. Yes.

Q. Did any of your other men go with you at that time? A. Yes, quite a few.

Q. So you could do nothing at all until the joints were dry? A. No, sir.

Q. Did there come a time you left the work because of other reasons? A. No.

Mr. Fitzgerald: You may cross-examine.

Cross-Examination

By Mr. Hilland:

Q. Mr. Hartley, you testified there was a time when you had as many as twelve men on the job.

Can you fix the time when you had as many as twelve men on that job? A. I cannot fix that time for you.

Q. That was some time later, in September, was it? A. It was later on in the job.

Q. Later on in the job? A. Later on in the job, yes.

Q. As a matter of fact, up until August 10, 1942, there were only two of you on the job, were there, one an asbestos worker and you had one helper part of the time? A. That is right.

Q. And then on August 10th another asbestos worker came and you had two asbestos workers and one helper.

Is that correct? A. Well, as far as the dates go I
350 cannot tell you of them dates.

Q. And it was not until about the 28th or the 29th of August, rather, that you had any substantial number of men on the job? A. It was pretty late that we had them.

Mr. Hilland: That is all.

(The witness thereupon was excused and retired from the witness stand.)

Mr. Fitzgerald: That is our case, your Honor.

The Court: Is there any rebuttal?

Mr. Hilland: May we approach the Bench?

(Counsel for the respective parties approached the bench and, out of the hearing of the jury, the following occurred:)

The Court: I will let the jury go until tomorrow morning.

Mr. Hilland: All right.

The Court: The jurors are excused until ten o'clock tomorrow morning, Mr. Clerk.

The Clerk of the Court: The jury is excused until ten o'clock tomorrow morning.

(Thereupon at 3:24 o'clock p.m. the jury left the court room.)

(The following then occurred out of the hearing of the jury:)

Mr. Hilland: If your Honor please, what I was going to say when I approached the Bench was about the question whether or not this question of responsibility for caring for the material on the site of the job was the general contractors' or the subcontractors' responsibility.

351 If your Honor rules it is the general contractor's responsibility we want to show that general custom—well, that is not the way I want to state it.

If your Honor rules it is not governed by the contract—

The Court (interposing): Usage rather than custom.

I think it is usage, rather than custom.

Mr. Hilland: General usage. Or, general practice.

The Court: I won't quarrel with those terms.

Mr. Hilland: I thought—maybe I have been laboring under a misapprehension, but I thought you had to show a universal custom.

The Court: Very well. I do not think it makes much difference what you call it.

Mr. Hilland: If your Honor rules that the subject is not covered by contract between these parties, then I should like to offer this expert witness on that subject.

We, of course, first contend it is governed by the contract on the theory that when they entered into this subcontract with us they impliedly assumed all of the general contractor's liability and responsibility under the terms of the principal contract insofar as those terms and provisions of the principal contract and plans and specifications related to the material and workmanship and equipment furnished and installed by the defendant.

There is no question about the fact that with regard to this problem the responsibility as between the United States and the plaintiff here was definitely fixed on the plaintiff. So that if they assumed that responsibility, it clearly became the responsibility of the defendant.

352 As I interpret the ruling of Mr. Justice Adkins in the other case to which I would call your Honor's attention, he made the ruling for which we contend here.

Your Honor has pointed out that that was a case of latent defects.

Our case now, as it has developed, is a case of some latent defect and some patent defect. But, whether it is because of patent or latent defect, or some of each, it seems to me that on principle, in either event, the subcontractor itself assumed the principal contractor's responsibilities and liabilities in relation to the material that the subcontractor is to furnish.

Now, in reality, Crockett Engineering Company did not do any work on the insulation or the waterproofing. They had no responsibility in relation to it as between the plaintiff and the defendant, and the mere fact that they even handled it was incidental to the work that the plaintiff had to do. Actually in handling that insulation and waterproofing, they did not work on it; they were actually working on the pipe which the insulation and waterproofing surrounded.

The Court: I do not know that you need to argue at any length on this and, unless Mr. Fitzgerald argues to the contrary, I am ready to rule.

Mr. Fitzgerald: The argument is that we were sued on certain pleadings, none of which he has been able to prove.

He said the pipe was not delivered according to schedule so that progress was delayed. There is no evidence to show that the cause of the stuff getting wet was the delay. There is a lot of evidence here to show that he went ahead and put a great deal of material there and left it open so that

353 the rain could come in and eat it up. But there is the crux of the thing. He should have been not so fast

in blaming the material and if any complaint was to stand about us in the matter of delay, and he was required to pay a penalty, he could sue us for that, for that failure to complete the work on schedule. There is no evidence here to show he suffered because of any delay or to show that the material got wet because the material was delayed.

The Court: The complaint charges that the field joints were neither properly made or installed. It seems to me the argument would not show it was properly installed if they were installed when the material was wet.

Mr. Fitzgerald: Our testimony was that it was not wet.

The Court: You can argue that to the jury.

* * * * * * * * * *

354 Mr. Hilland: Now, for the record, I would like to make a motion for a directed verdict in behalf of the plaintiff on the ground that the evidence shows, and it is not denied, that the plans provided that the manufacturer of this underground equipment should guarantee the insulation of his underground equipment and, moreover, the specifications provided that the insulation shall be completely waterproof; and, another point, it provides that it shall be properly insulated in such manner as to obtain a Thermal of ninety per cent or more.

The Court: I overrule your motion.

It is strange that able lawyers should differ!

Mr. Hilland: I wonder what disputed question of fact you have here.

The Court: Let me have your instructions tomorrow and I will decide what questions will go to the jury.

Mr. Hilland: All right.

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356 Mr. Hilland: If the Court please, shall I proceed with our rebuttal evidence?

357 The Court: What is that?

Mr. Hilland: May I proceed with the rebuttal evidence?

The Court: Yes. I didn't understand you had any.

Mr. Hilland: It will only take a few minutes.
Mr. Crockett, take the stand, please.

Thereupon **Charles T. Crockett** was recalled as a witness for and in behalf of the plaintiff in rebuttal, and having been previously duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified further as follows:

Direct Examination

By Mr. Hilland:

Q. Mr. Crockett, from the boiler house here to drop 1, what is the elevation with respect to this line from here to here? What is the general elevation of the area from the boiler room or power house up to drop 1? A. I don't know whether that distance on the drop is given or not.

Q. No; not the distance. What is the elevation of the ground? A. It is hard to determine that. By the length of the drop, I would say.

Q. I think it shows the drop is four feet. A. That is the difference in elevation.

Q. That is the difference in elevation between this point and this (indicating)? A. That is correct.

Q. Isn't there a drop No. 2? A. That is right.

358 Q. I think that drop is also four feet, if I remember correctly? A. It should be given on the plans.

Q. So the difference between the elevation from the boiler room and drop 1, over back here, would be eight feet difference, wouldn't it, if there are two at four feet each? A. If they are each four feet drops; yes.

Q. Now, when the pipe was laid in the trench and sealed and tested in that area, what were the weather conditions? A. The weather conditions were most favorable at that time.

Q. When you say that— A. (interposing) I mean by that that there was no rain at the time that pipe was laid, tested, and prepared ready for the building of the joints.

Q. Do you remember what the condition of the field joints, or the joints were, the ends of the magnesium insulation, at the time John Hartley came on the job? A. They were dry at that time.

Q. Do you remember whether or not he was able to start work immediately? A. He was.

Q. Did he do that? A. He started himself, immediately; yes.

Q. Now, when you got down, further down in the line, when these heavy rains came and the trenches filled up, after you put the temporary boiler on to dry out the line, did Mr. Droba at any time ever suggest to you that only a
359 pound and a half of steam be used? A. No; at no
time did he designate the pressure to be put on the line.

Q. When Mr. Droba suggested that vents be put in at the field joints, was that done immediately or was there any delay? A. It was done immediately.

Q. After steam had been put on the line and the waterproofing was steamed up from the top to the bottom of the cover, did Mr. Droba suggest a partial back fill around that Durant insulation? A. Yes.

Q. Was that done immediately? A. It was.

Q. Now, when or where these vents were put in the field joints was the magnesium wet at the time the defendant's men covered them and sealed these field joints? A. It must have been wet or they must have been—

Mr. Fitzgerald (interposing): I object.

The Court: I sustain the objection.

By Mr. Hilland:

Q. What was the purpose of the vents?

Mr. Fitzgerald: I object. That is not rebuttal.

The Court: I sustain the objection.

By Mr. Hilland:

Q. Well, of your own personal knowledge do you know what the condition of the magnesium insulation was at these points?

Mr. Fitzgerald: I submit, if your Honor please,—

The Court (interposing): I sustain the objection. You cannot go over the case again.

360 Mr. Hilland: Very well. In other words, your Honor's view is that it has been covered?

The Court: Yes.

Mr. Hilland: That is all. Your witness.

Cross-Examination

By Mr. Fitzgerald:

Q. Do you know, Mr. Crockett, the date that you made your first test? A. The record shows that. I don't recall the date.

Q. The record shows from Mr. Ecton it was July 23, 1942, and the record also shows that on June 30, 1942, you laid the four inch line. Wasn't it between the time of June 30th and July 23rd before you made any tests? A. I don't recall sitting here when the first tests were.

Mr. Fitzgerald: The record shows July 23, 1942, the first test was made.

Mr. Hilland: That is right. We haven't denied that.

By Mr. Fitzgerald:

Q. You say there was no rain between June 30th and July 23rd? A. There was no rain between the first time, the first section—There was no rain at this period.

Q. Do you know, as a matter of fact, there was a thunder storm, according to the record, according to the record of Mr. Ecton on July 20, 1942?

That is two days before your first test?

Do you have a record here, sir? I have notes on it.

The record should be produced to show that fact.

Mr. Hilland: You have the same access to those

361 records as I have.

By Mr. Fitzgerald:

Q. You deny then that on July 20, 1942, there was a rain?

Mr. Hilland: If the record shows it—he has not said he denied it.

Mr. Fitzgerald: I asked him if there was any rain between—

The Court (interposing): Let him answer the question.

The Witness: I could not definitely say whether there was rain at that time. It may have rained at one end of the Distrct and not in the other part of it.

By Mr. Fitzgerald:

Q. What was that? A. It could have rained at one section of the District of Columbia. I could not say from my recollection. It is not clear as to what happened two years ago.

Q. But if these records on the job indicate that there was rain on the 20th— A. (interposing) If the records prove that there was rain on the 20th, then there was rain on that day.

Mr. Fitzgerald: That is all.

Mr. Hilland: That is all, Mr. Crockett.

(Thereupon the witness was excused and retired from the witness stand.)

Mr. Hilland: Mr. Daniels, take the stand.

Thereupon **Frank C. Daniels** was called as a witness for and in behalf of the plaintiff in rebuttal, and having been previously duly sworn by the Clerk of the Court, assumed the witness stand and, upon examination, testified
362 further as follows:

Direct Examination

By Mr. Hilland:

Q. Mr. Daniels, when the pipe was laid from the boiler house to what point did it extend when the first test was made, if you remember? A. To manhole X.

Q. Manhole what? A. X.

Q. And that is close to what on Plaintiff's Exhibit No. 7 up there? A. That is close to building 55.

Q. Now, over in that area are there any drops in the elevation? A. Yes, sir.

Q. How many are there? A. One.

Q. All right, and is there any other drop later on? A. Yes, sir.

Q. How much are each of these two drops, if you remember? A. I would say approximately four feet.

Q. So what were the weather conditions when you laid and welded and tested the pipe?

Mr. Fitzgerald: I submit, he has gone over that.

The Court: I sustain the objection.

By Mr. Hilland:

Q. From the time you laid this pipe in the trench and tested it and welded it, welded it and tested it, what were the weather conditions?

363 Mr. Fitzgerald: I object to the question.

The Court: That has been gone over and I sustain the objection.

By Mr. Hilland:

Q. Now, do you remember that Mr. Droba suggested a partial back fill along part of the Durant insulation? A. Yes, sir.

Q. Was that back fill done? A. Yes, sir.

Q. When was it done with respect to the time Mr. Droba suggested it? A. It was done immediately.

Q. When were the vents installed with respect to the time that Mr. Droba suggested that vents be installed?

Mr. Fitzgerald: I think this has all been gone over.

The Court: I think so.

Mr. Hilland: All right. If it has been gone over, I didn't understand it.

If it is clear it has been gone over, all right.

The Court: I don't think it is proper rebuttal at all.

By Mr. Hilland:

Q. From the time the attempts were being made to dry out the magnesium and the boiler, the temporary boiler was installed, did Mr. Droba ever suggest that only a pound and a half of pressure should be used? A. No, sir.

Mr. Hilland: That is all.

Mr. Fitzgerald: I have no questions.

The Court: That is all.

364 (Thereupon the witness was excused and retired from the witness stand.)

Mr. Hilland: That is our rebuttal.

The Court: I will ask the jurors to withdraw, please, for a few minutes. You will withdraw from the room but remain within call.

(Thereupon the jury left the court room.)

(Thereupon counsel for the respective parties and the Court proceeded with a discussion of prayers, which will be furnished as an appendix to this record, if required, after which the jury returned to the court room.)

(Thereupon counsel for the respective parties argued their cases to the jury and the Court charged the jury as follows:)

The Court's Charge to the Jury.

The Court: Members of the jury, the plaintiff here, the Crockett Engineering Company had entered into a contract with the United States to equip and install a vacuum steam distribution system at the Army War College in Washington, District of Columbia, at the price of $84,155.

The plaintiff company undertook to let a portion of that contract to a sub-contractor, the defendant here, the Ehret Magnesia Manufacturing Company, and the defendant company then wrote a letter to the plaintiff accepting the offer of the plaintiff and agreed to deliver certain pipe, seventy-five pound steam lines of standard weight steel pipe insulated with dsbj—I have forgotten what that means.

Mr. Hilland: It means double standard broken joints.

The Court: Eighty-five per cent magnesia cover-
365 ing over which is applied a one inch thick coating of
high melting point, non-porous asphalt, finished with
a galvanized metal jacket or waterproof tubing approximately one-quarter inch thick, depending on whichever we must use to comply with conservation orders. Also some ten pond steam line pipe insulated in the same manner with the exception that the eighty-five per cent magnesia insulation will be one and one-half inches thick.

The defendant company also agreed to install the field joints and furnish insulation, asphalt, and casing to insulate the field joints and, that is, where the lengths of pipe are joined together in the field; said field joints not to exceed eighteen inches in length, and to furnish labor for the installing of these field joints.

Now, as I have said, the plaintiff was engaged in carrying out the work in accordance with the contract with the United States so that when the defendant entered into this contract with the plaintiff, the contract was not limited to the item stated in this letter, but the defendant impliedly assumed all the obligations and liabilities of the plaintiff under the principal contract, plans, and specifications insofar as the terms and provisions of the same related to the materials, equipment, and workmanship which the defendant had contracted to furnish and install. So that those particular terms and provisions of the contract of the plaintiff with the Government were also a part of the contract between the plaintiff and the defendant.

Now, the plaintiff claims that the defendant failed to carry out the terms of this agreement or to perform the
work in accordance with the drawings and specifica-
366 tions to which I have referred in that, first, the pipe
wasn't delivered according to schedule so that progress of the project was unreasonably delayed.

Now, as to that particular item, the plaintiff is not suing here on the ground that the defendant delayed in his work of furnishing the material, except insofar as that delay may have caused the defects that appeared in the work when completed.

Second, the underground installation was not made in accordance with the manufacturer's recommendation.

Third, the field joints were neither properly made nor properly installed.

Fourth, the steam line did not obtain a thermal efficiency of ninety per cent, which was required under the contract with the United States.

One of the most important controversies in this case has been as to whether or not—but before I go to that, I think there is no question that the work when completed was not in accordance with the plans and specifications; that it was defective and had to be done over by the plaintiff.

The question for you to determine is who was responsible for the failure of this work to comply with the specifications required under the contract with the United States. Probably the most important question which has been litigated in this case is the fact that it is claimed that this material was exposed to the weather and deteriorated by reason of that exposure.

Now, it was the duty of the defendant here to install
these joints in accordance with the terms of the con-
367 tract. It was his duty to see that the material which
he furnished was in proper condition when he did install it, and if the damage in this case resulted from his failure, either to see that the materials were in proper condition when installed or did not properly install them, then he breached his contract and is liable to the plaintiff.

Now, the specifications provided that the underground steam lines shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety per cent or more; that the underground installation shall be in accordance with the manufacturer's recommendations and shall be completely waterproofed, and these plans provided that the manufacturer of the underground equipment should guarantee the installation of his equipment.

If you find from the evidence that the insulation and waterproofing on the underground steam lines did not comply, in whole or in part, with the specifications and that as a result thereof the insulation and waterproofing on the underground steam lines was condemned, in whole or in part, by the United States Engineer's Office and that the United States Engineer's Office directed that the insulation and waterproofing on the underground steam line be removed and replaced, in whole or in part, as a result thereof, and if you further find that the defendant, after demand, refused to remove and replace the waterproofing and insulation or any part thereof so condemned and so directed to be removed and be replaced, then the defendant breached its contract and you should render a verdict in favor of the plaintiff.

But if you find that the failure of the pipe line
368 to produce a ninety per cent thermal efficiency was
the result of a failure of the plaintiff to follow the recommendations of the manufacturer as to the installation of his equipment, then your verdict should not be for the plaintiff but for the defendant. In other words, if that was the cause of the failure of this work to come up with the requirements of the contract, your verdict should be for the defendant.

It was a duty of the plaintiff to make the underground installations in accordance with the recommendations of the defendant, and if you find that the plaintiff failed to do so and that as a result of that failure that the material became damaged, then your verdict should be for the defendant.

If you find that the plaintiff proceeded to lay the piping without due regard to the reasonable and proper progress of the defendant in sealing the joints and as a result this particular damage occurred, then your verdict should be for the defendant.

Or if you find that the pipe line failed as a result of what plaintiff did in connection with sealing any of the joints, or in attempting to seal any portion of the line, then your verdict should be for the defendant.

Now, the burden of proof is upon the plaintiff to show by the greater weight of evidence that the defendant breached its contract. There is no dispute as to what the contract was, that is, so far as the law is concerned. The question is did the defendant breach the contract; did the defendant fail to carry out its obligations and as a result thereof the damage resulted to this piping?

I may tire the jury by repeating sometimes what they should take into consideration in determining the 369 weight of the evidence. It is largely a matter of common sense, and it is your duty to decide the facts, your duty alone, and any statement I make as to the facts is in no way binding on you.

But in determining the weight that you should give to the credibility of a witness, you should consider, first, the interest that the witness has in the result of this case, whether as plaintiff or defendant, or as an officer or employee of the plaintiff or defendant, or any other fact which may reasonably cause his testimony, not necessarily to be false, but to be biased. In other words, a man naturally looks on his own side of the case and his testimony, even though he has undertaken to tell the truth, may be biased more or less in his own favor.

You should consider the manner of the witness on the stand, the manner of testifying, and whether or not he is one who has actual knowledge of the facts to which he testified. In this case there has been no charge that any witness has wilfully testified falsely, but you should take all the facts into consideration in this case and determine whether or not the defendant has breached his contract in the manner in which I have indicated.

If the evidence is equally balanced, or you find the evidence in favor of the defendant, your verdict should be in favor of the defendant. On the other hand, if you find that the plaintiff has maintained the burden of proof, which is

incumbent upon him, your verdict should be for the plaintiff, and that would be in the amount claimed by the plaintiff, $19,915.06, and if you believe that the defendant should pay interest on that amount from October 7, 1943, that is within your discretion and you may so find. You
370 are not under obligation to do so but that is a matter
for you to decide if you believe it is a proper case for interest.

If you find for the defendant, your verdict would be simply for the defendant.

Do counsel have any further request?

Mr. Hilland: None for the plaintiff.

Mr. Fitzgerald: I have none.

The Court: I take it that you each renew the objections that you made before.

Mr. Fitzgerald: Yes.

Mr. Hilland: Yes.

The Court: The jurors will withdraw and consider your verdict.

(Thereupon at 2:17 o'clock p.m., the jury retired to consider its verdict.

Thereupon at 3:55 o'clock p.m. the jury returned to the court room and announced its verdict in favor of the defendant.

Thereupon at the request of Mr. Hilland the jury was polled and each member of the jury indicated that his or her verdict was that as previously announced by the foreman.)

(Thereupon the instant hearing was concluded.)

371 **Discussion of Prayers.**

(The following discussion was had out of the presence of the jury:)

The Court: Now, I will dispose of some of the defendant's prayers.

No. 1 is denied.

Mr. Fitzgerald: Your Honor will allow me an exception?

The Court: Yes.

Your No. 1 is denied.

Your No. 2 is denied. No. 4 is denied. Your No. 8 is denied, and I take it you take an exception in each case?

Mr. Fitzgerald: Yes, your Honor.

And the others are allowed?

The Court: I am not finally passing on those yet.

Plaintiff's No. 1 will be charged, and I take it you except to that?

Mr. Fitzgerald: I don't understand you, your Honor.

The Court: Plaintiff's No. 1 will be granted and I take it you except to that?

Mr. Fitzgerald: Yes, sir.

The Court: Aren't No. 2 and 3 more or less repetitious?

Mr. Hilland: Yes, if your Honor please, I think they are.

The Court: Which do you prefer?

Mr. Hilland: I prefer No. 2 as between 2 and 3.

The Court: I think that covers the field very well.

Do you withdraw No. 2 or 3?

Mr. Hilland: Let me see if I understand. Is that between 2 and 3?

The Court: I will not charge both to the jury.

372 Mr. Hilland: I think No. 2 would be preferable, if your Honor please. So we will withdraw No. 3.

Mr. Fitzgerald: And I except to that if your Honor please and take an exception.

The Court: I am going to change the last two lines,

"then the jury must find that" to "then the defendant breached its contract with the plaintiff, and the jury should return a verdict for the plaintiff."

Mr. Fitzgerald: No. 3 is withdrawn, Mr. Hilland?

Mr. Hilland: Yes.

The Court: Do you object to that change?

Mr. Hilland: Sir?

The Court: Do you object to that change?

Mr. Hilland: No, I prefer it and I thank your Honor for the suggestion.

The Court: And the defendant excepts?

Mr. Fitzgerald: Yes, your Honor.

The Court: No. 4 will be granted and you except?

Mr. Fitzgerald: I except to it.

The Court: On No. 5, is there any controversy as to the amount of damages, if any?

Mr. Fitzgerald: We haven't any controversy as to that.

The Court: It seems to me if they find for the plaintiff they should return a verdict in every amount claimed if they deem it proper. I cannot see the necessity of going through charge No. 5.

Mr. Hilland: I won't insist on that if they are going to be told that.

The Court: You withdraw that?

373 Mr. Hilland: Yes, sir.

The Court: No. 6 will be granted.

What do you say about defendant's No. 3?

Mr. Hilland: I haven't had a chance to read it. May I have one minute?

The Court: Yes.

Mr. Hilland: The only difficulty in this is that there is a limitation with respect to what their duties were with respect to the underground installation. I think that would be very confusing. It is too broad. It may give the jury the impression that the plaintiff was compelled to do something to the insulation and waterproofing. That is the difficulty with it.

Mr. Fitzgerald: That is in the specifications, Mr. Hilland.

The Court: I think this is the law. Do you except to the charge?

Mr. Hilland: Yes.

Mr. Fitzgerald: That is granted, No. 3?

The Court: Yes.

Mr. Hilland: We will take an exception, if your Honor please.

The Court: I don't quite understand No. 5.

Mr. Fitzgerald: Well, the meaning of that, if your Honor please, it means they were welding and laying this pipe, many hundred feet of that, and when it was raining or the weather was bad, before we were able to catch up with them, and if they continued laying that and did so without due regard for the reasonableness of our opportunity to keep up with them and causing by reason of that the 374 wetness or the dampness of the magnesia, then as to that, proceeding and going along and knowing the stuff was wet, it was their fault.

The Court: Well, that will be charged.

Mr. Hilland: May we have an exception?

The Court: Yes.

Mr. Hilland: May I take up something about No. 5, if your Honor please?

The Court: Yes.

Mr. Hilland: It seems to me that that tells the jury that both the plaintiff and the defendant had a right to violate the express terms of the general contract. You remember there was a schedule of progress or progress schedule of the defendant.

The Court: But if the plaintiff violated it, he can't put the blame on the defendant.

Mr. Hilland: Let us assume he kept up with them and the defendant didn't.

The Court: I think this is the law.

What do you say about No. 6?

Mr. Hilland: I think the first part of it is all right but the alternative "or the result of the doing by the plaintiff or omitting to do any act for the proper installation of the pipe-line" is not.

What they were supposed to do was to follow the recommendations of the defendant. They were under their supervision and direction for the installation of it. It seems to me that covers it and the balance of it is entirely too broad.

Mr. Fitzgerald: There was some testimony by Mr. Droba and also certain testimony by Mr. Vandersluis as
to the recommendations made by Mr. Droba with re-
375 gard to backfill, holding the material up, and the in-
stallation of the vents.

Now, our man said it was a considerable length of time and you say it was done within a day or so. I think it is a question of fact if they did or didn't do certain things. I think it is quite proper.

The Court: Strike out the last, the alternative of that, and I will charge it.

Mr. Fitzgerald: Beginning with what words, your Honor?

The Court: Beginning with "or".

Mr. Fitzgerald: Or the result and all the way to the end?

The Court: Yes. I think it is rather too indefinite to start with—or the result of the doing by the plaintiff or omitting to do any act for the proper installation of the pipeline.

I will charge them up to and including the word "Material".

Mr. Fitzgerald: Then, your Honor will permit me to have an exception to that part which is stricken out?

The Court: Oh, yes, certainly.

Is there any objection to No. 7, Mr. Hilland?

Mr. Hilland: If I may have one minute to read it, please. I don't think there is any objection to that.

The Court: Well, I will charge that. I think that disposes of all of them.

* * * * * * * * * *

377 Plaintiff's Prayer No. 1

The jury are instructed that the defendant, as a subcontractor under the principal contract between the plaintiff and the United States Government, impliedly assumed all of the obligations and liabilities of the plaintiff under the principal contract, plans, and specifications insofar as the terms and provisions of the same related to the materials, equipment and workmanship which the defendant contracted to furnish and install.

Charged.
Ex.

* * * * * * * * * *

378 Plaintiff's Prayer No. 2

The jury are instructed that the specifications provided that the underground steam lines shall be properly insulated in such a manner as to obtain a thermal efficiency of ninety percent (90%) or more; that the underground installation shall be made in accordance with the manufacturer's recommendations and shall be completely waterproof and the plans provided that the manufacturer of the underground equipment shall guarantee the installation of his equipment. If the jury finds from the evidence that the insulation and waterproofing on the underground steam lines did not comply, in whole or in part, with these specifications and that as a result thereof the insulation and waterproofing on the underground steam lines was condemned in whole or in part by the United States Engineers office and that the United States Engineers Office directed that the insulation and waterproofing on the underground steam lines be removed and replaced in whole or in part, as a result thereof, and if the jury further finds from the evidence that the defendant, after demand, refused to remove and replace the waterproofing and insulation or any part thereof so condemned and so directed to be removed and replaced, then the jury must find that the defendant breached its contract with the plaintiff, and the jury should return a verdict for the plaintiff.

Granted.
Ex.

* * * * * * * * * *

379 **Plaintiff's Prayer No. 4**

The jury are instructed that it was the defendant's duty and responsibility to protect the material and equipment furnished and installed by it from any and all damage that might result from weather conditions and that this duty and responsibility on the part of the defendant continued until its installation of the field joints was completed.

Granted.
Ex.

* * * * * * * * * *

380 **Plaintiff's Prayer No. 7**

The burden of proof is on the defendant to prove its charge that the condemnation of the waterproofing and insulation on the underground steam line by the United States Engineers' office, if any, was due solely and entirely to the plaintiff's own negligence.

Denied.
Ex.

* * * * * * * * * *

Defendant's Prayer No. 1

381 If you find that the failure of the pipe-line was due to exposure to rain or other action of the elements after the material was delivered at the Army War College your verdict should be for the defendant.

Denied.

* * * * * * * * * *

382 Defendant's Prayer No. 2

If you find that the failure of the pipe-line was due to exposure to rain or other action of the elements after it was delivered by the defendant at the Army War College by reason of the plaintiff's failure to properly protect the same from the rain or other action of the elements, your verdict shall be for the defendant.

Denied.

* * * * * * * * * *

383 Defendant's Prayer No. 3.

The jury is instructed that it was the duty of the plaintiff to make the underground installation in accordance with the recommendations of the defendant, and if you find that plaintiff failed so to do and as a result the material became damaged, your verdict shall be for the defendant.

Charged.
Ex.

* * * * * * * * * *

384 Defendant's Prayer No. 4.

The jury is instructed as a matter of law that there was no duty on the part of the defendant to protect the material from rain or other action of the elements after it was delivered at the ArmyWar College by the defendant.

Denied.

* * * * * * * * * *

385 Defendant's Prayer No. 5.

If you find that the plaintiff proceeded to lay the piping without due regard to the reasonable and proper progress of the defendant in sealing the joints, and as a result thereof the piping became damaged, the defendant is not liable for such damage.

Charged.
Ex.

* * * * * * * * * *

386 Defendant's Prayer No. 6.

If you believe that the failure of the pipe-line to produce a 90% thermal efficiency was the result of a failure of the plaintiff to follow the recommendations of the manufacturer as to the installation of the material, (*or the result of the doing by the plaintiff or omitting to do any act for the proper installation of the pipe-line,*) your verdict shall be for the defendant.

Charged as amended.
Ex. by D

(Italics indicate wording stricken)

* * * * * * * * * *

387 Defendant's Prayer No. 7.

If you find that the pipe-line failed as the result of what the plaintiff did in connection with sealing any of the joints, or in attempting to seal any portion of the line, then your verdict must be for the defendant.

Charged.
Ex.

* * * * * * * * * *

382 Defendant's Prayer No. 2

If you find that the failure of the pipe-line was due to exposure to rain or other action of the elements after it was delivered by the defendant at the Army War College by reason of the plaintiff's failure to properly protect the same from the rain or other action of the elements, your verdict shall be for the defendant.

Denied.

* * * * * * * * * *

383 Defendant's Prayer No. 3.

The jury is instructed that it was the duty of the plaintiff to make the underground installation in accordance with the recommendations of the defendant, and if you find that plaintiff failed so to do and as a result the material became damaged, your verdict shall be for the defendant.

Charged.
Ex.

* * * * * * * * * *

384 Defendant's Prayer No. 4.

The jury is instructed as a matter of law that there was no duty on the part of the defendant to protect the material from rain or other action of the elements after it was delivered at the ArmyWar College by the defendant.

Denied.

* * * * * * * * * *

385 Defendant's Prayer No. 5.

If you find that the plaintiff proceeded to lay the piping without due regard to the reasonable and proper progress of the defendant in sealing the joints, and as a result thereof the piping became damaged, the defendant is not liable for such damage.

Charged.
Ex.

* * * * * * * * * *

386 Defendant's Prayer No. 6.

If you believe that the failure of the pipe-line to produce a 90% thermal efficiency was the result of a failure of the plaintiff to follow the recommendations of the manufacturer as to the installation of the material, (*or the result of the doing by the plaintiff or omitting to do any act for the proper installation of the pipe-line,*) your verdict shall be for the defendant.

Charged as amended.
Ex. by D

(Italics indicate wording stricken)

* * * * * * * * * *

387 Defendant's Prayer No. 7.

If you find that the pipe-line failed as the result of what the plaintiff did in connection with sealing any of the joints, or in attempting to seal any portion of the line, then your verdict must be for the defendant.

Charged.
Ex.

* * * * * * * * * *

BRIEF FOR APPELLEE

IN THE

United States Court of Appeals

DISTRICT OF COLUMBIA

United States Court of Appeals
for the District of Columbia
FILED JAN 31 1946
Joseph W. Stewart
CLERK

No. 9036

CROCKETT ENGINEERING COMPANY,
a Maryland Corporation, *Appellant,*

v.

EHRET MAGNESIA MANUFACTURING COMPANY,
a Pennsylvania Corporation, *Appellee.*

Appeal from the District Court of the United States for the District of Columbia.

JOHN DILLON FITZGERALD,
DONALD M. SULLIVAN,
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Washington 5, D. C.,
Attorneys for Appellee.

PRESS OF BYRON S. ADAMS, WASHINGTON, D. C.

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IN THE

United States Court of Appeals

DISTRICT OF COLUMBIA.

No. 9036.

CROCKETT ENGINEERING COMPANY,
a Maryland Corporation, *Appellant,*

v.

EHRET MAGNESIA MANUFACTURING COMPANY,
a Pennsylvania Corporation, *Appellee.*

Appeal from the District Court of the United States for the District of Columbia.

BRIEF FOR APPELLEE.

COUNTER-STATEMENT OF CASE.

Appellant and appellee entered into a contract whereby appellee agreed to furnish certain insulated piping in connection with the construction of an underground steam distribution system to be installed by appellant at the Army War College, Washington, D. C., under a contract between appellant and the United States.

The pipe was to be delivered at the Army War College by appellee, and was to be delivered in sections, insulated and waterproofed except at the ends of each section where the bare pipe projected for several inches in order to allow appellant to weld the sections together on the field. When the pipe arrived at the site, appellant was to distribute the sections of pipe, install them in the trenches, line them up to grade requirements, weld all joints, and test all such welded joints. Then appellee was to insulate and waterproof the joints.

After the pipe was delivered by appellee, appellant proceeded to lay it in the trenches in such unreasonable quantities and without testing the welds in any part of it (App. 123, 124, 222), that the magnesia insulation on great quantities of the pipe became wet before the welds were even tested by appellant (App. 153, 189, 222, 223). Until the welds had been so tested by appellant it was impossible for appellee to proceed with its work of covering the joints (App. 39, 153). The insulation having thus become wet, it was necessary for appellee to wait until it had dried out before covering the joints (App. 98, 225, 226), as any water sealed in the insulation would destroy both the insulation and the asphalt waterproofing (App. 29, 75, 83). It was suggested that appellant run steam through the pipe in order to help dry out the magnesia insulation, but appellant was warned by appellee not to use over one or two pounds of steam (App. 191), for the reason that the heat would be transmitted by the wet magnesia directly to the asphalt, and any more pressure than this would melt the asphalt (App. 136, 191, 206). Notwithstanding this warning, appellant used *ten* and *fifteen* pounds of steam pressure (App. 136, 206, 215) with the result that the asphalt melted and flowed (App. 135, 191, 224) and caused the fiber casing to sag (App. 203). Appellee suggested to appellant that vents should be put in so that the joints could be covered without waiting for the insulation to dry out completely, but appellant delayed putting in the recommended vents (App.

148, 192, 214). Appellee also suggested to appellant that when heat was applied to dry out the magnesia insulation the trenches should be partially backfilled so as to support the fiber casing. This backfilling was necessary because any sagging of the casing would permit the asphalt, if it should soften, to settle at the bottom of the casing instead of remaining in position all the way around the magnesia insulation (App. 192, 202). This recommended backfilling was never done by appellant (App. 193, 194, 202, 226). If this asphalt waterproofing should settle at the bottom of the casing and thereby cease to completely encircle the magnesia insulation, moisture from the ground would readily enter the magnesia and destroy its insulating power. If this happened in any one place, the heat, when the steam was turned on, would be transmitted by the wet magnesia to any remaining asphalt which would be thereby melted and would leave its proper position. Such a process would continue until the entire section in which the original break existed was destroyed. (App. 29, 75, 83). Also, notwithstanding the fact that appellee's pipe coverers progressed as rapidly as conditions permitted (App. 153, 224, 225, 226, 227), appellant took over appellee's job of covering and pouring some of the joints (App. 45, 46, 47) and sealed or attempted to seal joints at various points (App. 93, 94, 95). The jury returned a verdict for appellee, upon which judgment was entered.

SUMMARY OF ARGUMENT.

1. (A) It was appellant's duty to protect the magnesia insulation from the weather. The sales contract provided for delivery of the sections of pipe at the Army War College. After delivery, appellant was to distribute the sections of pipe, install them in the trenches, line them up to grade requirements, weld all joints, and test the welds. After all those things should have been done by the appellant, appellee was to insulate and waterproof the joints. The title passing from the seller as soon as the pipe sections

were delivered, they were thereafter at the risk of the buyer, and it therefore became his duty to protect them from the weather, especially where both appellant's contract with the United States and the Government's specifications provided that *appellant* was to protect the materials on the job.

(B) In any event, the trial court did not err in *conditionally* admitting evidence that appellant had not protected the magnesia insulation from the weather, *because the court subsequently granted appellant's Instruction No. 4 which plainly stated that it was* **appellee's** *duty to so protect it.* The granting of this instruction, which was read to the jury by counsel for appellant, effectively removed any possibility of doubt in the minds of the jurors as to whose duty it was to protect the magnesia insulation. Having been thus instructed, it became the jury's duty to determine whether the failure of the pipe-line was caused by the failure of appellee to protect the magnesia insulation from the weather or was caused by the appellant's negligence in regard to the work it did. The jury correctly determined this question in favor of appellee.

2. The Court properly overruled appellant's motion for a directed verdict. There was overwhelming evidence that the failure and condemnation of the whole pipe-line was solely due to appellant's negligence in the following respects, among others:

a) Appellant's negligence in proceeding to lay the piping without due regard to the reasonable and proper progress of appellee in sealing the joints.

b) Appellant's negligence in failing to follow the recommendations of appellee concerning venting, backfilling, or limiting the steam pressure used to dry out the line.

c) Appellant's negligence in sealing or attempting to seal the field joints or other portions of the pipe-line.

3. Appellant *now* objects to appellee's instructions numbered 3 and 5 on the ground that they authorized the jury to find for appellee if they found that appellant caused any of the damage to the insulation and waterproofing. Although the jury undoubtedly understood that the damage referred to meant damage to all the insulation and waterproofing condemned and ordered replaced, any question as to its meaning could have been avoided by amendment if appellant had made known this ground of his objection before the jury retired, as required by Rule 51, Federal Rules of Civil Procedure.

Appellee's instruction numbered 3 did not mislead the jury into believing that appellant had a duty to install the insulation and waterproofing. It merely told the jury that appellant was liable for any damage caused by it in that part of the underground installation actually made by appellant.

Appellee's instruction numbered 5 was likewise a correct statement of the law as applied to the case. Appellee was required only to maintain a reasonable and proper progress, and appellant was itself responsible for the damage caused by its laying of piping in unreasonable amounts and without due regard to appellee's reasonable and proper progress.

4. The trial court correctly refused to grant appellant's request for instruction numbered 7 to the effect that the burden of proof was on the appellee to prove its charge that the condemnation of the waterproofing and insulation, if any, was due solely and entirely to appellant's own negligence. Appellee's "sole cause" defense was not a confession and avoidance. It was not an affirmative defense. It was merely an additional denial of appellant's allegations of the complaint.

ARGUMENT.

Point 1.

A. It was Appellant's Duty to Protect the Magnesia Insulation From the Weather.

The sales contract between appellant and appellee provided for delivery by appellee of the sections of pipe at the Army War College (Ex. 6). Appellant was then to distribute the pipe to the points on the job where required, install it in the trenches, line up the pipe in the trenches to grade requirements, weld all the joints, and finally, test the joints so welded to make certain that they were watertight. After appellant had done all these things, appellee was to insulate and waterproof the joints. The contract is not taken out of the category of a sale merely because the seller (appellee) was to insulate and waterproof the joints after delivery, when the cost of insulating and waterproofing the joints is small compared to the cost of the pipe itself. That being so, the question as to whose duty it was to protect the magnesia insulation after the pipe was delivered must be determined by reference to the Sales Act (Sections 28-1101—28-1608 of the District of Columbia Code, 1940 Edition). Section 28-1206 of the D. C. Code, 1940 Edition, provides:

> "Risk of loss. Unless otherwise agreed, the goods remain at the seller's risk until the property therein is transferred to the buyer, but when the property therein is transferred to the buyer the goods are at the buyer's risk whether delivery has been made or not. * * *"

This brings us to the question of when the property in the goods was transferred to the buyer (appellant). Section 28-1203 of the D. C. Code, 1940 Edition, provides:

> "Rules for ascertaining intention. Unless a different intention appears, the following are rules for ascertaining the intention of the parties as to the time at which the property in the goods is to pass to the buyer:

* * * * * * * * *

> "Rule 4. (1) Where there is a contract to sell unascertained or future goods by description, and goods of that description and in a deliverable state are unconditionally appropriated to the contract, either by the seller with the assent of the buyer, or by the buyer with the assent of the seller, the property in the goods thereupon passes to the buyer. * *
>
> "Rule 5. If the contract to sell requires the seller to deliver the goods to the buyer, or at a particular place, or to pay the freight or cost of transportation to the buyer, or to a particular place, the property does not pass until the goods have been delivered to the buyer or reached the place agreed upon."

Consequently, the property in the pipe passed to appellant no later than the time of its delivery by appellee at the Army War College, and from that time on, applying Section 28-1206, *supra,* the pipe was at the risk of appellant.

Even prior to the Uniform Sales Act, this principle was recognized. *Hunt et al.* v. *Suares,* 9 La. 434, in which the goods were held to be at the buyer's risk after delivery, was a very similar case. Plaintiffs, in that case, brought an action to recover for merchandise sold and delivered under a contract for putting up certain marble mantle and chimney pieces for defendant, the plaintiffs obligating themselves to furnish the necessary materials, and to do the work and labor. Defendant pleaded that before any of the chimney pieces were put up and finished, the house in which they were to be put up was destroyed by fire, and that all of said materials destroyed in the house were at the risk of the plaintiffs. In holding, on appeal, that the goods were at the risk of the purchaser, the court said:

> "It appears to us from the evidence, that the principal contract was one of sale of the mantle pieces ready made, and that the agreement to put them up and furnish materials for that purpose, does not take the contract as to the mantle pieces out of the rule which governs that species of contract, and that as soon as they were delivered, they were at the risk of the purchaser, unless a special agreement to the contrary be shown.

> There is nothing in the record to show that the plaintiffs understood the contract at the time, as it is now interpreted by the defendant, and the cost of putting up is trifling, compared with the cost of the article."

The rule is stated in Mechem on Sales (1901), Vol. I:

> "Title may pass though seller is to do something to the goods after delivery.—So, clearly, the title to a specific chattel may pass at once, even though the seller is bound to do something in reference to the goods after their delivery, as to repair or regulate a watch sold, or put in operation an engine sold, and the like." (p. 402).

This is especially true where, as here, the purchaser was to add to the article, after delivery, materials or labor of his own before the seller was required to do something to the article sold. (*Mount Hope Iron Co.* v. *Buffinton,* 103 Mass. 62).

In addition to this, the contract between appellant and the United States placed upon *appellant* the responsibility "for the proper care and protection of all materials delivered and work performed until completion and final acceptance" (Article 10 of Ex. 4), and the government specifications provided that "All material and work covered by partial payments shall thereupon become the property of the Government, but this provision shall not be construed as relieving the *contractor* from the *sole* responsibility for the care and protection of materials and work upon which payments have been made, * * *" (Ex. 5, Sec. 1-09). These two provisions clearly placed upon *appellant* the sole responsibility of protecting the material. Furthermore, these two provisions cannot be construed as being carried over into the contract between appellant and appellee for the purpose of fastening a similar responsibility upon appellee, as contended by appellant. A like contention was attempted to be made, to no avail, in the case of *H. P. Cummings Const. Co.* v. *Marbleloid Co.,* 51 F. (2d) 906, 908. In that case the question was raised whether a provision in a subcontract that the subcontractor was to lay floors "in accordance with the plans and specifications" incorporated by reference a provision in the specifications that the contractor was to indemnify the state of Maine for damages due to poor workmanship so as to impliedly require the subcontractor to in turn indemnify the contractor for damages due to poor workmanship. In holding that this provision of the specifications did not become a part of the contract between the contractor and the subcontractor, the Circuit Court of Appeals, Third Circuit, said:

> "But the reference in the subcontract to 'the plans and specifications of H. S. Coombs, Architect,' was evidently for the mere purpose of identifying the floors to be laid and the manner in which the work was to be done in laying them. The rule of law based upon authority and sound reason is that in the case of subcontracts, as in other express agreements in writing, a reference by the contracting parties to an extraneous writing for a particular purpose makes it a part of their agreement only for the purpose specified. (Citing cases) It was far from the intention of the defendant, when it entered into the contract to lay floors, to incorporate therein all the provisions of the plans and specifications in the contract between the plaintiff and the state of Maine."

It is well settled law that the insertion in a subcontract of a provision that the subcontract is to be in accordance with plans and specifications does not thereby incorporate *all* the provisions of the plans and specifications, but is merely for the purpose of indicating what work was to be done and the manner in which the work was to be done. *(Guerini Stone Co.* v. *Carlin Constr. Co.,* 240 U. S. 264, 277; 60 L. Ed. 636, 642).

The duty to protect the pipe, and the magnesia insulation on it, from the weather being thus placed upon appellant by reason of its contract with the United States, and by reason of the government specifications, as well as by reason of the Sales Act, the trial court should have granted appellee's prayer No. 4 (App. 248) and should have instructed the jury that there was no such duty on the part of appellee.

B. There Was No Error, in Any Event, in the Conditional Admission of Evidence That Appellant Did Not Protect the Magnesia Insulation From the Weather, Because the Court Later Ruled That It Was Appellee's Duty to so Protect It.

Appellant claims that admission of evidence that appellant did not protect the magnesia insulation from the weather caused the course of the evidence to proceed upon the premise that it was appellant's duty to protect it. It is respectfully submitted that such an argument is in conflict with the record. At no time was the jury told by the trial court that it was appellant's duty to protect it. On the contrary, the trial court, in the presence and hearing of the jury, refused to rule either that this was the appellant's duty or that it was the appellee's duty, saying:

> "I will let this stand for the present without ruling finally on the effect of it." (App. 85)

Later, in reply to a similar objection by appellant to similar evidence that appellant did not protect the insulation, the trial court, again in the presence and hearing of the jury said:

> "It is put in on the same condition." (App. 117)

In any event, the error, if any, in the conditional admission of the evidence complained of, was cured by the granting of appellant's Instruction No. 4, as follows:

> "The jury are instructed that it was the defendant's duty and responsibility to protect the material and equipment furnished and installed by it from any and all damage that might result from weather conditions and that this duty and responsibility on the part of the defendant continued until its installation of the field joints was completed." (App. 247)

Any possible misapprehension by the jury of its use of the evidence complained of, was removed by the granting of this instruction, which was read to the jury by appellant's counsel, and by him discussed and explained at great length in his argument to the jury. Appellant, having thus had the full benefit of this instruction, now seeks another trial on the ground that the instruction was not read to the jury *by the court.* Appellant cannot "have his cake and eat it too!"

The well settled rule of law that an erroneous admission of evidence can be cured by an instruction to the jury to disregard it was recognized by the U. S. Supreme Court in the case of *Pennsylvania Co.* v. *Roy*, 102 U. S. 451, 26 L. Ed. 141. That case was an action for damages for personal injuries. The plaintiff was allowed, against the objection of the defendant, to make proof as to his financial condition and to show that, after being injured, his sources of income were very limited. In holding that this erroneous admission of evidence was cured by a subsequent instruction to the jury to disregard it, the Supreme Court, speaking through Mr. Justice Harlan, said:

> "Notwithstanding this emphatic direction, that the jury should exclude from consideration any evidence in relation to the pecuniary condition of the plaintiff, the contention of the defendant is, that the original error was not thereby cured and that we should assume that the jury, disregarding the court's peremptory instructions, made the poverty of the plaintiff an element in the assessment of damages; and this, although the record discloses nothing justifying the conclusion that the jury disobeyed the direction of the court. To this position we cannot assent, although we are referred to some adjudged cases which seem to announce the broad proposition that an error in the admission of evidence cannot afterwards be corrected by instructions to the jury, so as to cancel the exception taken to its admission. But such a rule would be exceedingly inconvenient in practice, and would often seriously obstruct the course of business in the courts. It can-

> not be sustained upon principle, or by sound reason, and is against the great weight of authority. The charge from the court, that the jury should not consider evidence which had been improperly admitted, was equivalent to striking it out of the case. The exception to its admission fell when the error was subsequently corrected by instructions too clear and positive to be misunderstood by the jury.'' (102 U. S. at pages 458-9; 26 L. Ed. at page 145)

Appellant seeks to avoid the general rule as recognized in *Pennsylvania Co.* v. *Roy* by stating that ''During more than three trial days the jury was allowed to hear evidence that appellant had not protected the magnesia insulation from the weather'' (Appellant's Brief, p. 8) and that ''once they (jurors) have been taught one thing for a long time they cannot by one brief instruction be taught the contrary'' (Appellant's Brief, p. 10). Such an argument fails to take into account the fact that appellant himself introduced evidence that *appellee* had not protected the magnesia insulation from the weather (App. 118, 119, 130). If appellant's line of reasoning is correct, it might just as well be argued by appellee that when the trial court admitted evidence that appellee had not protected the insulation from the weather, the jury was led to believe throughout the trial that it was the duty of the appellee to protect the insulation from the weather. Be this as it may, the granting of appellant's Instruction No. 4 effectively removed any possibility of doubt in the minds of the jurors as to whose duty it was to protect the magnesia insulation. The jury's verdict for the appellee doubtlessly proceeded on the theory, amply supported by the evidence, (see pages 15-17 of this brief) that the failure of the pipe-line was due not to any failure of appellee to protect the magnesia insulation from the weather, but rather was due to appellant's negligence in proceeding to lay the piping without due regard to the reasonable and proper progress of the appellee in sealing the joints, or to the negligence of appellant in sealing or attempting to seal the field joints or other portion of the pipe-line, or to the negligence of appellant in failing to follow the recommendations of appellee concerning venting, backfilling, or limiting the steam pressure used to dry out the line.

Rule 61 of the Federal Rules of Civil Procedure provides:

> "Harmless Error. No error in either the admission or the exclusion of evidence and no error or defect in any ruling or order or in anything done or omitted by the court or by any of the parties is ground for granting a new trial or for setting aside a verdict or for vacating, modifying, or otherwise disturbing a judgment or order, unless refusal to take such action appears to the court inconsistent with substantial justice. The court at every stage of the proceeding must disregard any error or defect in the proceeding which does not affect the substantial rights of the parties."

The record discloses nothing to justify the conclusion that the jury disobeyed this instruction of the court, but rather, there is a presumption that the jury considered only the legal evidence in the case, as the Supreme Court held in *Pennsylvania Co.* v. *Roy, supra:*

> "The presumption should not be indulged that the jury were too ignorant to comprehend, or were too unmindful of their duty to respect, instructions as to matters peculiarly within the province of the court to determine. *It should rather be, so far as this Court is concerned, that the jury were influenced in their verdict only by legal evidence.*" (102 U. S. at page 459; 26 L. Ed. at page 145) (Italics supplied.)

The burden is on appellant to show that prejudice resulted from a claimed erroneous ruling, as clearly pointed out in the case of *Palmer* v. *Hoffman,* 318 U. S. 109, 116; 87 L. Ed. 645, 651. In that case the Supreme Court, in considering a claimed erroneous and prejudicial ruling of the trial court, said:

> "Mere 'technical errors' which do not 'affect the substantial rights of the parties' are not sufficient to set

aside a jury verdict in an appellate court. (February 26, 1919) 40 Stat. 1181, c. 48, 28 USCA Sec. 391. *He who seeks to have a judgment set aside because of an erroneous ruling carries the burden of showing that prejudice resulted.*" (Italics supplied)

Moreover, the entire record in this case affirmatively shows that the claimed erroneous admission of evidence was *not* prejudicial to appellant.

Point 2.

The Court Did Not Err in Overruling Appellant's Motion for a Directed Verdict, the Result in the Case is Just, and is in Accord with the Evidence, with the Weight of the Evidence and with the Law.

The overwhelming evidence proved that the failure and condemnation of the whole pipe-line was due to appellant's negligence.

The waterproofing and insulation were not defective when the pipe was delivered by appellee (App. 80, 180-2, 225). The joints in the magnesia insulation were properly staggered (App. 196, 197, 198, 226). The ends of the magnesia insulation were necessarily exposed when the pipe was delivered because the bare pipe was to project several inches beyond the insulation and waterproofing at each end of the twenty foot sections of pipe in order to permit the sections of pipe to be welded together by appellant on the field. Appellant was told, before the contract was entered into, that the ends of the magnesia insulation would be so exposed when the pipe was delivered (App. 177, 178). Appellant had been shown Exhibit No. 28 (App. 175-6) which showed that the magnesia insulation would be so exposed (Sheet No. DP 302) and which stated that "the system is completely waterproof *as soon as* the joints have been finished" (Sheet No. DP 301). No representation was ever made that the ends of the pipe sections were waterproof before the joints were sealed on the field. Moreover, appellant made no complaint when he saw that the pipe was being delivered by appellee with the ends of the magnesia exposed (App. 111).

Appellant proceeded to lay the pipe in the trenches in unreasonable quantities (App. 123, 124, 222) and these great quantities of pipe became wet before appellant had even tested the welds in any part of it (App. 153, 189, 222, 223). Appellee was required to await completion of the test of the welds before it could begin to insulate and waterproof the joints (App. 39, 153). Appellant states in its brief that "Rains came after the time the appellee should have completed the installation of the insulation and waterproofing" (Appellant's Brief, p. 21). However, the record shows that on July 20, 1942, there were thundershowers in the late afternoon (App. 151) at which time the pipe had been laid in the trenches all the way from the Boiler Room to Manhole B, *exposed* and *untested* (the first test of any kind on any part of the line not being made by appellant until three days later, viz., July 23rd) (App. 121, 151, 152, 153, 156). On June 30th and July 3rd the pipe had been placed in the trench from the Boiler Room to the end of the paint shop (App. 148-9); on July 6th from the paint shop to loop No. 2 (App. 149); on July 7th as far as Building 55-B (App. 150); on July 17th from Building 55-B to Manhole A (App. 150) and on July 20th from Manhole A to Manhole B (App. 150-1). Appellee, being required to wait until the welds had been tested before it could even begin installing the insulation and waterproofing, could not go ahead on any of this pipe until after July 23rd, by which time there had already been thundershowers. Even then, much of this pipe (from Manhole X to Manhole A and from Manhole A to Manhole B) was still untested (App. 121, 151-3, 156). Although Mr. Crockett testified emphatically that this test was a one hundred pound *steam* pressure test (App. 25, 26, 80), he later admitted that the test was not made with steam at all, but was made with *water* (App. 80, 81).

The insulation thus becoming soaked with water before the tests were made, appellee could not proceed to insulate and waterproof the joints even after the tests were completed until the insulation could be dried out (App. 98, 225, 226), because any water sealed in would destroy the insulation and the waterproofing as soon as the heat was turned on (App. 29, 75, 83).

In the course of drying out the magnesia insulation, the suggestion was made that appellant might hasten the drying by running steam through the pipe, but appellant was warned by appellee, through appellee's agent, Mr. Droba, "that there should not be over *a pound or two pounds* of steam on the boiler because the excessively high temperature might cause the asphalt to flow" (App. 191). Notwithstanding this and subsequent warnings (App. 136, 206), appellant used *ten* and *fifteen* pounds of steam pressure (App. 136, 206, 215) and as a result the asphalt did melt and flow (App. 135, 191, 224) and caused the casing to sag (App. 203).

Appellee suggested to appellant that vents should be put in so that the joints could be covered without waiting for the insulation to dry out completely (App. 148, 192, 214), however, appellant delayed putting in these recommended vents (App. 148, 192, 214).

While appellant was running steam through the pipe to dry out the magnesia, appellee suggested to appellant that the trench be backfilled at least half way up the side of the pipe so that it would rest on the ground and not be suspended, for if it were so suspended the weight of the asphalt which had softened would sag the casing (App. 192, 202). This recommended backfilling was never done by appellant (App. 193, 194, 202, 226).

Appellee's pipe-coverers proceeded with the installation of the insulation and waterproofing of the field joints as rapidly as conditions permitted (App. 153, 224, 225, 226, 227) but were unable to work much of the time for lack of dry joints to cover. Appellant wanted appellee's pipe-coverers to seal the joints while they were still wet (App. 223) but appellee refused. Appellant then placed his own pipe-coverers on the job (App. 45, 46, 47, 48) who took over appellee's job of pouring and covering joints. Appellant's pipe-coverers made or attempted to make joints at numerous places in the line (App. 93, 94, 95). They made joints and poured drops one and two (App. 93); made joints and poured loops 3 and 4 (App. 93); poured loop No. 5 (App. 94); made the joints and poured loop 6 (App. 94) made joints up with magnesia block at loops 8 and 9 and put the casing on at these loops (App. 94-5), but later ripped the casing (but not the magnesia block) off of loops 8 and 9 (App. 95).

With such a showing by the evidence that the failure and condemnation of the pipe-line was due solely to the fault of appellant, the verdict of the jury is conclusive as to this question of fact, and it would have been error for the trial court to grant appellant's motion for a directed verdict. *Gunning* v. *Cooley*, 281 U. S. 90, 74 L. Ed. 720; *Boaze* v. *Windridge & Handy, Inc.*, 70 App. D. C. 24, 102 F. (2d) 628; *Weisenberg* v. *Hazen*, 63 App. D. C. 398, 73 F. (2d) 318; *McWilliams* v. *Shepard et al.*, 75 U. S. App. D. C. 334, 127 F. (2d) 18; *Walford* v. *McNeill*, 69 App. D. C. 247, 100 F. (2d) 112.

Gunning v. *Cooley*, *supra*, states the well-settled rule:

> "Issues that depend on the credibility of witnesses, and the effect or weight of evidence are to be decided by the jury. And in determining a motion of either party for a peremptory instruction, the court assumes that the evidence for the opposing party proves all that it reasonably may be found sufficient to establish, and that from such facts there should be drawn in favor of the latter all the inferences that fairly are deductible from them." (281 U. S. 90, 94; 74 L. Ed. 720, 724).

The jury having decided this question of fact in favor of appellee, its decision, supported by substantial evidence, as shown above, is binding upon a reviewing court. *Tennant* v. *Peoria & Pekin Union R. Co.*, 321 U. S. 29, 88 L. Ed.

520; *McCartney et al.* v. *Holmquist,* 70 App. D. C. 334, 106 F. (2d) 855; *Sorrels* v. *Alexander,* 79 U. S. App. D. C. 112, 142 F. (2d) 769; *American Ice Co.* v. *Moorehead,* 62 App. D. C. 266, 66 F. (2d) 792.

The case of *Ehret Magnesia Manufacturing Co., Inc.* v. *Gothwaite,* —— U. S. App. D. C. ——, 149 F. (2d) 829, cited by appellant as authority for its contention that the trial court should have directed a verdict for appellant, is manifestly inapplicable here. The all-important distinction between that case and the present case was clearly brought out by this Court, speaking through Mr. Chief Justice Groner:

> "and nothing appears whereby to charge these conditions to anything Gothwaite was required to do or did do." (149 F. (2d) 829, 830).

Here, as shown above, there was an abundance of evidence whereby to charge the failure of the pipe-line to what appellant "was required to do or did do".

Appellant contends that appellee was liable absolutely and unconditionally to produce and guarantee certain results and that even if the failure to produce those results was caused solely by the fault of appellant, appellee is liable to appellant for such failure. It is significant that appellant has not cited a single case to support such a novel and inequitable proposition. The authorities are to the contrary. The correct rule is stated in a Case Note at 8 L. R. A. (N. S.) 1171:

> "While it is a well-settled rule of law that, if one makes an absolute and unqualified contract to perform certain work, he must perform his agreement at all hazards, and will therefore be responsible for any defect that is afterwards discovered, *he will, nevertheless be excused if the defect is due to an act of the other party.*" (Italics supplied.)

Likewise, the case of *H. P. Cummings Const. Co.* v. *Marbleloid Co.,* 51 F. (2d) 906, *supra,* holds that a subcontractor, sued by a contractor to indemnify the contractor for damages due to poor workmanship, may show that the damage was caused by the contractor himself. In that case the Circuit Court of Appeals for the Third Circuit held:

> "In such case the defendant may show that the injury complained of was occasioned in whole or in part by the acts or conduct of the plaintiff, or any other matter which as between it and the plaintiff would exonerate it from liability. Hoppaugh et al. v. McGrath, 53 N. J. Law 81, 21 A. 106."

In *Gray* v. *Wells,* 118 Cal. 11; 50 Pac. 23, the plaintiff Gray, as assignee of Gray Bros., brought an action to recover for labor and materials used in constructing a wall for defendant. Wells defended on the ground that Gray Bros. had agreed to "guaranty it for five years against all defects that may arise through fault of workmanship or material used, and guaranty the wall to hold the bank unless undermined on the north side". It was proved that several days after the wall was finished, but while it was still very green, the defendant, over the protest of Gray Bros., insisted upon piling dirt against it, and that this earth filling was the cause of the wall's toppling over. The case was tried by the court without a jury and judgment was entered in favor of plaintiff. Notwithstanding a finding by the trial court that "any and all defects in the construction of the wall, if any there were, were occasioned by the conduct and interference of the defendant himself while said wall was in process of construction", defendant, on appeal, claimed that, under the guaranty, plaintiff was not entitled to recover unless the wall was undermined on the north side or unless the wall did not crack and topple over, even though the trial court had found that Gray Bros. performed the work in a skillful and workmanlike manner, with proper materials. The Supreme Court of California, in affirming, answered this contention by saying:

> "This guaranty must be read and construed together, and it could not have been intended to have effect under any and all circumstances, but only in case the wall

should fail to hold the bank by reason of defects arising from fault of workmanship or materials used in its construction." (118 Cal. 11, 14-15; 50 Pac. 23, 24.)

In view of all the foregoing, it is respectfully submitted that the trial court did not err in overruling appellant's motion for a directed verdict and that the result in this case is just, is in accord with the weight of the evidence and is in accord with the law.

Point 3.

The Court Did Not Err in Granting Appellee's Requests for Instructions Numbered 3 and 5.

Appellant *now* claims that both of these instructions were erroneous in that they authorized the jury to find for appellee without requiring a finding that the damage caused by appellant resulted in the failure and condemnation of all the insulation and waterproofing which was condemned and ordered replaced. Aside from the fact that the jury undoubtedly understood that the damage referred to in these instructions meant damage to all the insulation and waterproofing which was condemned and ordered replaced, no such ground of objection as to either of these instructions was made known by appellant before the jury retired (App. 241, 243-4). Such an undesirable practice is prohibited by Rule 51 of the Federal Rules of Civil Procedure:

> "No party may assign as error the giving or the failure to give an instruction unless he objects thereto before the jury retires to consider its verdict, *stating distinctly the matter to which he objects and the grounds of his objection.*" (Italics supplied.)

If appellant had made known this ground of objection to these instructions before the jury retired, they could readily have been amended so as to have avoided even the slightest possibility of any misunderstanding on this point.

Even if appellant's statement were true that "from Manhole F to the officers mess building nothing occurred that the appellee could possibly have blamed on appellant'', such fact could have no bearing on this appeal because that portion of the line was not included in the 2,100 lineal feet of line which were condemned and ordered replaced. The Complaint was concerned only with that portion of the steam line extending from the boiler room to the pump room (Par. III of Bill of Particulars, App. 6-7).

Appellant's other objection to appellee's instruction numbered 3 is that the jury was misled into believing that appellant had a duty to install the insulation and waterproofing. The language of this instruction is not capable of such a strained and unreasonable construction. The meaning of this instruction was plain, viz., that if that part of the underground installation which was actually made by appellant was made by it not in accordance with the recommendations of appellee, appellant was liable for the resulting damage. As shown above (pages 15-17 of this brief) a great part of the underground installation was actually done by appellant. Appellant itself placed the pipe in the trenches (in unreasonable quantities); attempted to dry out the line after it became wet, used excessive steam pressure in such attempt, delayed venting, and did not backfill; and poured and covered joints at numerous places in the line. There was no possibility of any misunderstanding by the jury on this point.

Appellant's other objection to appellee's instruction numbered 5 was that it, in effect, told the jury that appellee had a right to control the progress of appellant's work. Certainly appellee was required only to maintain a ''reasonable and proper progress'' in sealing the joints. Appellee was not required, at its peril, to keep up with the laying of the pipe no matter how fast appellant saw fit to lay it, especially when, as the evidence showed (see pages 15-16 of this brief), great quantities of pipe were lying in the trenches for a considerable period of time during which the welding and testing *by appellant* had not been completed. If appellee did not keep up a reasonable and proper progress in its work (although the evidence shows that appellee did maintain a reasonable and proper progress), appellee might have been liable for damages suffered by appellant by reason of the delay in the completion of the project, but no such damages were alleged or proved.

Point 4.

The Court Did Not Err in Denying Appellant's Request for Instruction Numbered 7.

The trial court correctly refused to grant appellant's request for instruction numbered 7 to the effect that the burden of proof was on the appellee to prove its charge that the condemnation of the waterproofing and insulation on the underground steam line by the U. S. Engineers' Office, if any, was due solely and entirely to appellant's own negligence.

Appellee's answer did not constitute an affirmative defense. Appellee merely denied the allegations of the complaint that it had breached its contract and supported its denial by an allegation that the condemnation, if any, was due *solely* and *entirely* to appellant's own negligence. Appellee's defense was not a confession and avoidance. It denied, rather than confessed, the basis of appellant's cause of action, viz., that appellee had breached its contract, and appellee did not thereby assume the burden of proof. The rule is stated in 31 Corpus Juris Secundum, Sec. 104 (b), pages 713-715:

> "In accordance with the general rule, * * *, that a party has the burden of proof as to those issues as to which he has the affirmative, plaintiff has the burden of proof as to all the elements of his claim or cause of action. The burden is on defendant to prove matter in avoidance, special or affirmative defenses, and other new matter urged by him as ground for denying the plaintiff relief. *However, defendant, by specially pleading matter which he could prove under a denial of the plaintiff's allegations, does not assume the burden of proof as to such matters.*" (Italics supplied.)

It is a well recognized rule that a "sole cause" defense is not an affirmative defense. *Hanna* v. *Stoll,* 112 Ohio St. 344, 147 N. E. 339; *Springfield Gas Co.* v. *Herman,* 46 Ohio App. 309, 188 N. E. 733; *Giesendorf* v. *Brashear Truck Co.,* Mo. App., 54 S. W. (2d) 72; *Hardman* v. *Younkers,* 15 Wash. Rep., 2nd Series, 483; 131 P. (2d) 177.

In *Hanna* v. *Stoll, supra,* the defendant denied that the collision, out of which the suit arose, occurred by reason of any carelessness or negligence on his part, and alleged that such collision was caused directly and wholly and solely by reason of the carelessness and negligence of the plaintiff. In reversing a judgment for the plaintiff, the Supreme Court of Ohio held that it was prejudicial error to instruct the jury that the burden of proof was on defendant as to the averment of sole negligence on the part of the plaintiff. The Court said:

> "There is in it (the answer) no confession and avoidance. The defense of contributory negligence was not pleaded, for it has been uniformly held by this court that the issue of contributory negligence is not presented by the pleadings, where the defendant in addition to his general denial pleads that plaintiff's own negligence was the sole cause of the injury." (147 N. E. 339, 340.)

Hardman v. *Younkers, supra,* was a case in which the defendants, who were sued for damages occasioned by an automobile collision, answered denying generally the allegations of negligence and also set up affirmatively a plea of "unavoidable accident". In holding that the burden of proof was not upon the defendants to show that the injury came about through an unavoidable accident, the Supreme Court of Washington said:

> "Since a general denial puts in issue all the facts alleged as constituting the negligence charged, and since proof of 'unavoidable accident' in its very nature tends to refute or rebut such charge as alleged in the complaint the burden of proof on the issue of negli-

> gence remains with the plaintiff throughout the case and does not shift to defendant upon his attempt to disprove negligence by showing that the injury came about through an unavoidable accident.
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> * * * * * * * * *
>
> "It is true, as indicated above, that appellant did not rely merely on a general denial, but also set up affirmatively a plea of 'unavoidable accident'. That fact, however, does not change the rule respecting the burden of proof, because the special plea was not in the nature of a confession and avoidance; it did not amount to anything more than a denial of negligence; and it was purely gratuitous." (131 P. (2d) 177, 181.)

The cases cited by appellant in its brief as supporting this instruction are not applicable. They hold that the defendant has the burden of proving an affirmative defense,—a proposition of law as to which there is no dispute. The flaw in appellant's argument is that no affirmative defense was present in this case. The case of *Robinson, Norton & Co.* v. *Tuscaloosa Mills,* 183 Fed. 966, relied upon by appellant, gave three reasons for placing the burden of proof on defendant: "(a) The defendant makes the affirmative defense allegation; (b) it relates to a matter especially within the defendant's knowledge, the proof of which was necessary and essential to the defendant's defense; and (c) the plaintiff had made proof of a prima facie case, which, if not admitted by the pleadings, was undisputed by the evidence, excepting, of course, the evidence offered in support of the new matter pleaded." Not one of these reasons is present in this case. The appellee did not make an affirmative defensive allegation; appellee's defense related to a matter especially within appellant's rather than appellee's knowledge; appellant's case was not admitted by the pleadings and was disputed by the evidence.

The case of *Drouin* v. *Wilson,* 80 Vt. 335, 67 Atl. 825, which was cited by appellant in its brief, might better be cited by appellee. In that case defendant was sued for breach of covenant requiring him to surrender rented premises in as good condition as they were in when taken, ordinary wear and damage by fire or providential causes excepted. Defendant admitted the fact set up as a breach,—the leaving of a broken plate glass window,—but said that that did not constitute a breach because it was within one of the excepted clauses for the reason that the glass was cracked in the course of the ordinary wear and use of the building. The court held:

> "The plea is, in effect, a traverse of the allegation that the breaking was not due to any of the excepted causes, and alleges the facts relied upon to bring it within one of those causes. The allegation of the declaration thus traversed was an essential one, for without it the covenant would not have been correctly stated. The plea being in substance a traverse, the burden of proving the issue was on the plaintiff, and the charge on this respect was correct."

CONCLUSION.

It is respectfully submitted that the judgment below should be affirmed.

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